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story on home canning appears in this issue. The Big House Nuisance is a subject well handled. We all know how the new house runs away with our pocketbook. The essentials in housebuilding are stated in the regular better house plans series running.

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Walk Into My Living Room.
The Jersey-Angus Cattle Cross.
Dairy Versus Beef.
The Work of the Month.
Hot Weather Housekeeping, Why of Hog Cholera,

Several departments of special interest as well as a review of the best things in other farm journals appear. The illustrations are numerous, the paper high class, while the cover design of the July issue will make you want to get out into the open places, where clover blooms, elm trees, sleek cattle, and running brooks spell creature comforts.

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HAMILTON

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# MACLEAN'S MAGAZINE

#### AUGUST, 1915

#### O Contents o

#### FEATURE SPECIALS CANADIAN SPECIALS What Canada should do to preserve her forest wealth A review of Winston Churchill's "A Far Country." SERIAL STORIES SHORT STORIES Ringers Three......Bert Thomas 35 REVIEW OF REVIEWS Recruiting by Poster..... 47 Watching the Automobile Grow Up. 56 The Ambitions of Japan..... 57 The Cultivation of the Land...... 48 Cadorna, 'The Joffre of Italy"..... 49 Trench Warfare ..... 59 The American View..... 50 The Blindness of Germany..... Has Kitchener Four Million Men?.. 51 Why You Are Rich or Poor..... 65 Good Homes Make Good Workers... 53 Marconi's Wireless Telephone..... 67 More and Cheaper Gasoline...... 54 Canoeing For Girls....... 73 The Machine That Thinks...... 55 Love and Marriage in Pigeon Land. 75

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The Wire ..... 105

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# The Publisher's Page

The following letters from subscribers to MacLean's Magazine show how it fills a fundamental need in the Canadian home:

"I must say that I appreciate very much this most splendid magazine and the improvements you have made since I first became a subscriber. I hope that all thoughtful readers in Canada will encourage you in your good work."—H. D. Wood, Fairville, N.B., May 11, 1915.

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# MACLEAN'S

MAGAZINE WWW

Volume XXVIII

AUGUST, 1915

Number 10

# How I Escaped from Germany

SINCE the year 1907, I had lived in Berlin and had filled many engagements in different opera houses in Germany; singing in Wagnerian roles. On the fifteenth of June last year I entered upon an engagement with the Summer Opera in Berlin. Wagner's Ring was to have been produced fifteen times. However, as the war broke out before the termination of the season, I only sang on six occasions, four times in the role of Sigmund and twice as Siegfried. I was to have appeared for the fifth time as Sigmund on the memorable night when war was declared.

When the crisis between Great Britain and Germany came to a climax, it was unofficially given out that alien subjects would have twentyfour hours to leave the coun-In addition to my connection with the opera, there were arrangements to be made with reference to my house, which rendered it impossible for me to leave on such short notice. Accordingly I resigned myself to the inevitable. I would remain in Berlin until the war was over, and peace declared. It was not originally the intention of the military authorities to put peaceful civilians into concentration camps; and, knowing this, I felt reasonably safe.

The six months that followed were full of anxiety but not, at the first, of any particular discomfort. The increasing bitterness of the German people toward everything English, made my position at all times seem more

or less precarious. My thoughts continually dwelt with longing on the possibilities of escape to England and of entering the British army where my knowledge of the German language and people would be of some small help in the great struggle. There were many British subjects

By LISSANT BEARDMORE



The writer photographed in the costume in which he made his remarkable trip.

in Berlin, and an anxious colony of exiles they were, but I had only one friend to whom I could confide these longings to escape from the country—Mr. H.—, a Canadian. Poor H—, sad to relate, is now in the concentration camp at Ruhleben, doomed to remain in a horse stable

until the end of the war. We often used to put our heads together over the maps the fighting lines on east and west. At first, of course, we were led to believe that the German armies were sweeping everything before them. Then, however, English and Dutch newspapers began to come through to us spasmodically and from them we learned how the situation actually stood. A stroke of great good fortune put us in possession of minutely de-tailed military maps of the different sections of the firing line; and from that time on we were in a position to judge the accuracy and truth of the German version. Our gloom vanished and we became quite optimistic.

The early successes of the German armies in Belgium and East Prussia led the people to believe that nothing could stop them from conquer ing the world. So high did Teutonic hopes run that they could hardly credit it when the tide of victory reached its height and then began to recede. When the German lines were flung back from the Marne and the Russian ad-vance through Galicia began, and the general staff could no longer announce great victories, people began to get depressed. You could see evidences of it everywhere, on the faces of the people and in their mood. To lighten the gloom, the military authorities resorted to trickery, a simple matter where official domination is so absolute and the public mind so supremely credulous. During the winter at least three or four great

victories were announced which were purely imaginary. Whenever false news of German victories was thus being circulated in the German press to keep up the spirits of the people, the supply of newspapers from outside would mysteriously stop; in fact all communication with

the neutral world would be broken for several days. We soon learned the significance of this and, when-ever the blazoning of a Teutonic victory was coincident with the sudden and mysterious break of communication with the outside, we knew that the official faker had been at work again. The same was true when there were British, French or Russian victories to be chronicled. The silence of the German press would be accompanied by another break in communication. The people, in fact, were cozened and misled. It was clumsily done but effective. Every time the inspired headlines announced a nother imaginary triumph, out came the flags and a regular gala day would ensue. The Germans were so ravenously hunfor victory

that they greedily seized upon every crumb thrown to them; and never stopped to question.

THE greatest hoax of all, perhaps, was a victory over the Russians that was announced in December. Under huge headings, the newspapers gave it out that the German army in Poland had so thoroughly whipped the Russians that further resistance on the part of the forces of the Czar was out of the question. The authorities ordered the inhabitants to decorate the cities with flags. In a few hours the streets of Berlin were nothing but a mass of color. The usually stolid populace went nearly frantic with enthusiasm. They saw the end of the war in sight and the realization of Germany ambitious hopes. My friend H- and I were very much amused by it all; for the supply of neutral papers had suddenly ceased and we knew that the War Office had been "at it again." The object of this colossal fabrication quite apparently was to keep up the spirits of the new troops about to leave for the front.

Around the first of November, storm clouds began to brew upon the horizon of the British colony in Berlin. The British authorities had put a lot of Germans who were suspected of spying into concentration camps and great enmity was aroused throughout Germany on this account. Accordingly on the first day of the month, Germany sent an ultimatum to Britain to



Maria Theresienstrasse, principal street of Innisbruck, the beautiful Tyrolean capital.

—Copyright, Underwood and Underwood

the effect that all the English in Germany would be immediately interned if the Germans in England were not released by the sixth. The assumption is that the German spy system in England was being seriously hampered by the internment of the suspected parties and the threat was made with a view to securing the release of the Imperial agents. Great Britain paid no attention to the ulti-Consequently on November the matum. sixth all English, Scotch and Irish subjects were rounded up by the far from unwilling authorities and, to the intense satisfaction of the clamoring German civilians, were marched off to live in horse stalls at the race course of Ruhleben near

A LL the remaining alien enemy subjects, including British colonials, were put under a much more severe supervision. Up to this time we had been compelled to report to the authorities once every three days. But from this time on we were enjoined to report twice a day, morning and afternoon. Each one of us, in fact, received a permit of residence on which was printed the following rules:

Report twice a day.

Not to leave one's apartment before seven in the morning.

To be in one's house at eight o'clock at night.

Not to leave the district of Greater Ber-

lin in which one's home was situated.

Not to change one's abode without special permission from the authorities.

Any infringement of these rules would make one liable to military punishment -which might be a very serious matter. The permit of residence had to be presented at the police station twice a day to be stamped. On special occasions, as a great favor, one or more of these rules would be waived. Special written permission would be given by the authorities to this effect.

U P until the morning of Friday, January 29, I lived unmolested in my own home. On this particular morning I was sitting in a deep armchair reading the Berlin morning papers when

my eyes fell on a small notice tucked away in an obscure corner of the news columns:

"English Colonials to be interned."

The paper fell to the floor. A cold chill went over me. I felt a weak, sickly sensation, followed by complete exhaustion.

Internment! What should I do?

The thought of escape had always been with me and I had firmly rejected it after careful consideration. But now it was certain that, along with the other unfortunate Colonials marooned in this iron country, I would be interned. There was no time for reflection; a course of action had to be decided upon immediately. To remain meant internment and perhaps death from starvation before the end of the war. To attempt to escape meant perhaps freedom, perhaps capture and imprisonment under especially rigid conditions, perhaps death.

There was a sporting chance of getting out of the country safely. I decided to try it.

M Y first move was to get my money changed from German into Austrian and Swiss currency, as I realized that my best chance of getting away would be through Austria into Switzerland. In Austria, I knew, the authorities were not quite so strict and the hatred of the British was not so intense as in Germany. This would seem to make my chances much better and it also appealed to me

that if I were caught in Austria I would certainly be treated with greater leniency.

I told my housekeeper that I would be away for a short time and made the necessary arrangements with her to look after the house during my absence. At six o'clock the next morning, after spending a restless night, I was ready with a small valise to take the train into the mountains. I reported to the police that morning as usual, taking particular pains not to arouse their suspicions in any way. I left the police headquarters for the railway station and jumped on a train for the south. I had a carefully planned-out itinerary of escape in my mind.

It was lucky for me that I spoke the language like a native. Thanks to this fact, although my foreign appearance at times aroused inquisitiveness among the officials, I invariably passed as a German. My trip through Germany and Austria occupied seven days and during that time I was under a terrific nervous strain. Now that I can sit back calmly and review the incidents of that memorable trip I am amazed that I managed to stand the strain at all. Surrounded by bitterly hostile people at every turn, watched and questioned by chronically suspicious and autocratic officials, I was kept in a state of extraordinary tension. Naturally I could not swallow sufficient food to still the pangs of hunger; the effort of taking nourishment was torture.

Some idea of the closeness of the scrutiny to which I was subjected will be secured when it is stated that in all the trains in Germany the authorities have posted up notices ordering the public to be on the lookout for escaping aliens and also warning soldiers and officers not to speak to strangers about the strength or movements of troops. One reads in German:

"People of Germany be on your guard. We have agents and spies of the enemy in our midst, etc."

Like notices were continually appearing in the newspapers. Little wonder then that I felt as though I were traveling through a jungle of hostile eyes. Under such circumstances one imagines that the conductor is suspicious if he happens to ask for one's ticket twice; that the waiter in the dining-car has recognized one's identity if he is especially polite; that a fellow traveler is only waiting his chance to report at the next stop of the train if he happens to look at one twice in passing through.

It was ten-thirty in the morning that I took the train for the Silesian mountains. These mountains form the border between Germany and Austria in a district south-east of Berlin and are about seven hours' ride on the train from the capital.

I spent the first night after leaving Berlin in Oberscherberau Villa, Waldesruh. This village is not far distant from Hirschberg in Silesia, where some years previously I had made quite a name, when singing in the Opera House during the season. On arriving at the hotel in Oberscherberau, the proprietor welcomed me personally. He was extremely friendly, helping me to brush off the snow and seeing that I had every wish attended to.

Later his better half came in from a visit in the neighborhood. Although she endeavored to hide it, there was a tone of suspicion in her friendliness and, during our conversation, I tried in vain to find out whether she recognized in me an alien enemy. I took the first opportunity of retiring to my room to think matters over. Presently the maid knocked at the door. sent by the landlady with the registration book. I opened it and to my dismay found a note requesting me in the name of the police to register full name, duration of visit, place of abode in Germany, nationality, whether due for service, etc. This procedure was most unusual before the first or second day of residence in this outof-the-way place and robbed me of my first night's sleep. Many plans for immediate flight passed through my mind but, as it was blowing a blizzard and the whole country was enveloped in deep snow, one by one these prospects were abandoned. The storm shook the house from foundation to roof. The snow lashed the window panes and swept in through the cracks of the sill.

"Would the paths, which were to take me across the border in the morning, be snowed in? Would the suspicious landlady report me to the police to-night?"

A bell rang—the front door opened. Some one mounted the creaky wooden stairs and knocked at the door next to my room. "Were they hunting for me?" A pause—footsteps—boots being put outside a door—"Thank God! not this time."

The wind howled through the tree-tops and around the eaves of the chimneys, threatening with renewed fury to carry off the roof. At twelve o'clock there was a violent ringing at the front door bell. "Was it a late comer or the police?" I could hear voices in the hall—doors opened and shut—then silence. And I heaved a mighty sigh of relief. Through the weary hours of that long night the hopelessness of my state gradually impressed itself on my mind. When dawn broke I had resolved to return to Berlin, trusting to luck that the authorities would not have missed

me and would accept an excuse of illness for not having reported on Sunday.

A T seven a.m. there was a knock at my door and the maid brought in the hot water ordered the evening before. During breakfast a most friendly visit from the landlady gave me renewed courage to follow out my original plan. I made exhaustive inquiries in the village about the slides on the surrounding mountains.

During the winter months many German tourists spend their vacation sleigh-driving, sliding and skiing on these mountains. When war broke out the authorities lined the whole of the Austro-German border with sentries; no one was allowed to go from one country to the

other without a passport containing a photograph and personal description of the bearer. I knew, therefore, that the only chance of getting into Austria was by evading the military authorities, and that to accomplish this it would be necessary to cross the border in some out-of-the-way part of the counwhere the military supervision trv. less strict. Near Oberscherberau was the boundary between Germany and Austria runs along the summit of the mountains but the sentries are stationed on the paths and roads in the valley. The sentries exercise a good deal of leniency towards the tourists using the slides as they take it for granted that those who come down the slide from the German side return the way they come, and vice versa. These slides are divided into two runs, one for ascending and the other for sliding down. It is a very long and tedious walk up, so many people hire a horse and sleigh to pull them up. The sleighs used for this purpose are called "Hörnerschlitten," and are constructed to carry one passen-ger with the driver. Usually the horse is owned by one man and the sleigh by another-the owner of the horse drives up the hill with his passenger in front, while the owner of the sleigh walks behind. Arrived at the summit the horse and his owner return on foot, while the owner of the sleigh sits in front and steers down the slide with his passenger; thus one can be driven up the slide in one country and slide down on the other side into another country. I was told by the country folk, who earn a living driving people up the mountain, that it was very doubtful owing to the very heavy snowfall during the previous day and night whether the slide descending to Neuwelt, which is the first town over the border on the Austrian side, would be clear of the drifts before that evening. The slides are kept clear of loose snow by peasants, who take a toll of 60 pfennigs from the tourist for their labor. The ride up the mountain on the German side takes about four hours, and when the track is well beaten on the Aus-

trian side, twenty minutes slide down takes you to Neuwelt, in Austria. Once again the burning desire for freedom swept away all other considerations and I decided to take the chance of a successful

crossing of the mountain. It seemed ages before the lazy horse was brought around, hitched to the sleigh and on its way up the mountain side, the driver walking while I sat back to front almost under the horse's heels. Up, up we traveled. Looking down over the snow-clad country beneath us it seemed almost perilous for man or beast to ascend this steep incline. For two hours we labored in one long continuous climb up over the snow-clad mountains. The higher we climbed the deeper the snow. trees skirting the



looked like huge white marble pillars. The branches were thickly coated with newly-fallen snow. Even the telephone wire communicating with the solitary inn near the summit was weighted down. As we slowly emerged into the open the view of the surrounding mountains was exhilarating. The sun peeped through the clouds, bathing with lights of gold and silver the billowy snow-clad hills beneath. All my troubles disappeared in wonderment at the beauties of nature.

We reached the inn about noon. It was a two-storey, roughly built stone building almost hidden from view by the snow shoveled up as high as the roof. This was as far as the horse went with the sleigh. After paying off the driver we had lunch and commenced the three-quarters of an hour's climb, which was to take us to the summit, from whence the path descended on the opposite side of the mountain into Austria. The sleigh was pulled up this remaining bit of ground by the owner, but we were held up many times by drifts of snow and sometimes sank in waist deep. It was only with great difficulty, that we managed to get through some of the lowlying parts of the path, where the wind had drifted the snow up to the level of the ground above. At last, on arriving at the summit, we found to our great relief that the snow-plough had been at work and cleared a path into the valley. Our hard work was finished, as from here the path descended continuously.

Swift as the dove flies we bounded over the snow, the driver, an expert at the wheel, sitting in front to keep us in the centre of the slide. After an hour's run along precipices, down steep inclines, through pine groves and valleys we passed the sentry's house on the Austrian border. Probably the sentry never expected anyone would have the courage to brave the deep snow on the mountain after the stormy night, as he was nowhere to be seen and we passed his house unchallenged, whizzing by into freedom.

The first big step had been taken without detection. I was on Austrian soil. I had no luggage as it would have aroused suspicion to take any with me. I paid the man off.

I took train to Vienna and thence on towards the Italian frontier, intending to cross through the Tyrol Mountains to Italy and a place called St. Antoine, which is also a winter sports town, where tourists from Vienna go to spend their vacations. However, on nearing the frontier it became clear that it would be impossible to cross there unobserved, as the entire line for a number of miles back was one swarm of Austrian soldiers. I could see from the train window mountain soldiers playing up and down the hills on All the stations and points of skis. strategy were guarded by sentries. therefore decided, on consulting the map of the country, to continue my journey to Feldkirch, which is a small village a few miles from the Lichtenstein frontier. Owing to this changing of my original plans I had four hours' wait at "Franzens-feste" for the next train, leaving for Innsbruck.

These four hours came nearly costing me my freedom. One of the train officials to whom I gave an extra large tip for information regarding trains must have given the alarm.

"RANZENFESTE" is strategically the most important fortress between Austria and Italy, commanding the railroad and roads between these countries. I must have caused some suspicion, for on arriving at Innsbruck, a detective mounted the car, walked into my compartment and demanded in the name of the police, that I should show my papers. The detective appeared nervous and excited and had evidently been sent by the authorities at Innsbruck, who had received a telegraphic message from Franzensfeste to intercept my journey and make inquiries as to who I was and where I came from. The only paper I had with which there was a ghost of a chance of passing undetected was one from the Berlin police; a certificate of seven years' residence in Berlin as a householder. It described me as an Opera singer of Toronto, America, but did not mention Canada. He read it carefully through, examined the three different official stamps, date,

"Have you no passport from the American Embassy in Berlin?" he asked.

"No," I said, quite unconcernedly.
"But all Americans must have passports from the Embassy before travelling anywhere," he informed me.

I feigned the most profound ignorance and dismay. "What can I do?" I asked. "Where are you going?"

"To Davos to spend a few weeks skiing."

"But you can't get there without proper papers. Do you know anyone in Vienna who would vouch for your identity in procuring a passport?"

"No," I said, "But I have some friends in Zurich who would identify me."

The detective made an impatient gesture. "But you can't get to Zurich," he said.

At this stage of the interview I pretended to be worked up into a most violent state of dismay and, when he informed me that I could not return to Berlin, I became quite indignant and outspoken. As a result he seemed more convinced of my identity and said: "I am very sorry but I can take no responsibility for your further welfare." At this he slowly backed out of the compartment with a shrug of the shoulders that would indicate that he washed his hands of a traveller so imprudent as I appeared to have been.

The fact that the detective was ignorant as to the geographical situation of Toronto in America, was a piece of good luck which enabled me to escape capture there and then. The feeling of relief which I experienced when he had gone was something beyond description. I breathed a deep sigh of relief as the train slowly pulled out of the station towards the Swiss frontier.

On arriving at Feldkirch. I decided to try the same manoeuvre with the sentries on the border between Austria and Lichtenstein, trusting to their ignorance to pass unmolested.

I TRAVELLED all that night through the Tyrol, the most beautiful country in Europe and arrived early the next

morning at Feldkirch, a town of about ten thousand inhabitants. Here I hired a sleigh on the pretence of having a days' outing and gave the driver orders to drive to a certain town which was over the Austrian border; a fact which I pretended not to know. Nearing the frontier we passed levies of soldiers, evidently relieving the sentries along the main road. When we arrived at the line the sleigh was stopped by a sentry who demanded my passport. I produced the paper, which had carried me safely through the first contingency, trusting that the sentry's ignorance would be the means of my getting through; or at the worst that he would tell me to return from whence I came to secure a passport stamped and viséd by the military authorities of Feldkirch.

To my great dismay the sentry looked the paper over with every evidence of suspicion; convinced that the chance of getting past was now gone I quickly ordered the driver to turn back. And then something happened which gave me cause for serious alarm. An officer had been summoned to pass on the matter and, on his orders, the sentry mounted to the box, with his rifle and fixed bayonet and prepared to return with us. I heard instructions issued to go straight to police headquarters where I would have to identify myself. I was a prisoner!

I was first taken to the police headquarters and from there an officer and guard were told off to conduct me to the highest military authorities of that district. On my suggestion we all rode in the sleigh and after a few minutes' drive arrived at a very imposing building. Here amidst much red tape, saluting of the different officials, the officer in charge ushered me into a room and presented me to the 'Oberhauptmann.' He asked me to show my papers and give an account of my movements. When he saw the certificate of residence in Berlin with Toronto as my birth place, his first questions were: "Where is Toronto? Is that in the

United States?" I acknowledged that Toronto was in Canada, and that I was a Canadian as it was clear to me that further efforts to pass as an American were useless. The fact that an armed sentry was waiting outside the door with fixed bayonet lent great weight to the situation. I then produced all my papers; the Canadian passport, the permit of residence in Berlin, a contract with the Berlin Opera House when the War broke out, and several other papers to prove that I was Lissant Beardmore an Opera Singer, civil alien resident of Berlin, and not a spy endeavoring to pass under false pretences.

When the Oberhauptmann heard that I was an Opera singer, his whole attitude towards me changed. He smiled in a friendly manner and said he was a great lover of music and asked me in what cities in Germany I had been singing, also what roles I had been singing in. I told him, I had made a speciality of Wagner and that I was singing in Sigmund in Berlin when the war broke out. I showed him several picture of myself in costume which proved to him that I was not merely try-

Continued on Page 100.

# The Gate on Papa Chrom: By VICTOR LEESE Illustrated by J. HERBERT BEYNON

#### neat litbor." commented spruce Midshipman Farrell, recently appointed to No. 4 pinnace of the Shetland patrol: chance of a submarine lying up here, sir?"

"Heave the lead for Mr. Farrell, bow!" commanded the officer beside him, who, no longer in his first youth, found the other's curiosity something too insatiable for his comfort.

"Boat-hook do. sir?" The burly A. B. addressed stood up with an undisciplined grin. "It's about three feet."

Farrell flushed with annoyance. His lean superior puffed easily at a most unofficial pipe and said quietly: "Starboard a little. Steady! What's the bottom like, Smith?"

"Nasty rocks, sir. We just missed one." "Any more questions, Mr. Farrell," asked the smoker with a smile that disarmed the resentful boy.

"Not for the moment, sir. Unless," catching the other's humor, "you would care to tell me how the swimming is."

"The worst kind, while this ebb is running. Hard a-port! All right an hour after the turn in easy weather. Straight ahead for the stage, now, coxswain. Pipes out all! Stand by!"

Two minutes later the speaker stepped from a small landing stage to the firm ground of Papa Chrom, an outlying islet of the Shetlands, to meet the owner thereof, whose fair, round figure was making leisurely progress down a path cut in the rock. A fair round welcome and the reek of an excellent cigar were borne on the breeze before it.

The officer, wrapping himself in an official dignity very foreign to his character and habits, decided - for he had come to take note of little things-that the man with the cigar was rather more American than he ought to have been. At Coney Island in August, he would have accepted him as a plutocrat who cared for that kind of thing; in the Shetlands, and in spring, he seemed to require a trifle of explanation. Something in the way of explanation the officer already had; but it was a very nasty one, and nothing was to

be gained by jumping to conclusions.

"Mr. Essenberg, I presume!"

The fat man bowed. "K. G. Essenberg, of Rochester, N'York, and Papa Chrom, he replied, smoothly.

#### How Sub-Lieutenant Foster Discovered a Submarine Base



"My name is Foster, sub-lieutenant, of his Majesty's Naval Volunteer Reserve. I am sent from Lerwick to notify you that the bunting you are flying from your house on this island may be construed as an offence under the Defence of the Realm Act; and to request that you will be so good as to dispense with it, at once and for the period of the war. The message is courteously intended. I was desired to say that no suspicion of complicity with the enemy attaches to you"-the speaker made a mental reservation-"but that if suspicion is to be avoided the instructions already given to you by the Admiralty must be observed, both in the letter and in the spirit."

ITTLE FARRELL, away back in the L boat, wondered where a man who lounged through his duties as Foster did could have picked up that trick of standing with his hand on his sword. Farrell would have given a year's pay for the knack. During the week of his attachment to No. 4 pinnace he had not suspected his commander of being capable of it. He began to revise his estimates.

Foster, with a face of wood, noticed that the fat man reproduced his stiffness quite naturally and unconsciously. That he was apologetic and compliant was a secondary matter. Foster rated him a very adaptable man, and pondered on the influences that might be expected to produce ultra-Americanism in the Shetlands. Meanwhile he expressed formal appreciation of the good sense of the island magnate, and decided to thaw the ice.

"And how do you like Papa Chrom, Mr. Essenberg?"
"Fine," sa

said the fat man radiantly. "I've liked it better every year since I bought it five years ago. I work all winter - my business card and batch here all summer, except when Mrs. Essenberg runs in with the yacht and a friend or two. She is doing Iceland just now. You will know the Elsie? She lies up at Lerwick when Mrs. Essenberg is here. This harbor would tear her bottom out. I am proud of that boat, sir."

"I know her," replied Foster. "White boat: sail and Diesel engines - queer combination, but good! — name painted in fivefoot letters with the Stars and

Stripes fore and aft on her side-a very sensible precaution in view of what the German submarines are doing. I searched her off Papa Stour last week.

The thing that Foster omitted to say was that he had also searched her fifteen hours ago, and had unostentatiously as-certained that a good deal of the oil she had brought from New York for her en-gines had turned to water during her short stay in the Shetlands. He might have added that he was by no means unaware that Diesel engines were used in German submarines and that he was determined to know the present resting place and ultimate destination of the missing oil. The Elsie had brought enough to carry her half round the world at least, and had left for Reikiavik under canvas, probably with oil sufficient for

emergencies only.
"Everything O.K.?" demanded the

"Everything O.A.: demanded the American unconcernedly.

"Everything," said Foster, with equal unconcern, "except perhaps the crew."

"All Swiss," the other laughed.

"Couldn't get a square-head to sign on for a British port these days if I tried. for a British port, these days, if I tried. Mrs. Essenberg is a Swiss. I myself am a Rhinelander by descent, though I was born in the States, But come on up to lunch, and bring your pirates."
"Really-" said Foster, who had no in-

tention of allowing the opportunity to escape, "I ought-"

"No excuses. England expects that every man will get his dinner. Business and meals as usual. An empty stomach never won promotion." And to himself he added: "or those lean flanks would have made you a commodore by this, my bold sub-lieutenant." For Mr. Essenberg was a judge of men; and Foster, however much he might look like a lazy man in a comfortable job, was marked by a life not always easy.

"I'm afraid I'll have to search your island first," said Foster. "Formal thing,

you know."

And he detailed a boat-guard of three, dividing his other six men into parties of inspection under Farrell and the cox-

"And so," said Essenberg, puffing up the ascent in the rear of the procession, "I can't fly the little old Stars and Stripes on my birthday."

"Indeed," replied Foster, loading his disreputable pipe, "I-er-thought it was-er-Washington's birthday. May I

trouble you for a match."

His natural turn had been exquisitely timed to catch a momentary shade of embarrassment on the face of his host. But as compared with Mr. Essenberg's rapid fumble in his waistcoat pocket, Foster realized that his trick was clumsy. If, indeed, Mr. Essenberg's action was a trick. That was the point. And if he usually kept his matches in his waistcoat.

'What do you know about that!" exclaimed that worthy, allowing himself to grow more visibly annoyed. "I haven't a match. But I should not think of celebrating Washington's birthday in England. Hate to rub it in, you know. And you are a month or two out in the date. Stick your pipe away and try one of my

"Thanks," said Foster. "You can take it from me that England's feelings

don't need to be considered, though. That's the kind of thing that isn't done. Only thing you have to be careful about is to say 'Britain' when talking to a man with a Glasgow accent. As for the Stars and Stripes, you can paper your dining-room with it and wrap it round your hat for all anyone here will care. But just at present you must not fly anything that can be seen from the sea. Not a Union Jack, nor a pair of socks on the clothes line; and not a light in a window or outside the house at night."

That is certainly go-ing some," remarked Essenberg; "I don't remember that the Admiralty mentioned the clothes line."

"The clothes line is confidential. I am supposed to observe the washing and say nothing."

"I'm afraid I don't quite get you."

"Signalling, know. I caught a fellow a short time ago advertising the number of destroyers in the harbor at Lerwick with tablecloths and shirts. Morse code. Frightfully clever." And forthwith Foster, knowing that no such signal had been discovered on Papa Chrom in weeks of careful watching, proceeded to exaggerate and glory in his trifling achievement with studied indiscretion.

Essenberg encouraged him, not pressing for information, but obviously relaxing a little in the assurance that his guest had a failing in keeping with his

manner.

So they found themselves approaching a stone house of moderate size and recent construction, set on the highest point of the islet toward the side opposite to the harbor. A spacious conservatory flanked the southern verandah, and the whole was surrounded by a well-kept garden, fenced off from the hundred-odd acres of indifferent pasture that the treeless rock afforded, by bull-wire strong on stout concrete posts, topped by a single strand of plain wire.

Two men were at work in the garden. Essenberg ordered one of them to take down the flags with which the parapet of the house was plentifully decorated. The other he introduced to Foster as Martin Dool, an Irishman and "some character."

"Give me a match, Martin," said Essenberg pleasantly. The man, who had not spoken, handed him a box from which both helped themselves and lit their cigars.

Essenberg carefully filled the vest pocket which had recently disappointed him and then his right-hand trouser pocket. Foster, bending over his light, noticed that the match which the other used came quite naturally from the second store, and therewith was content. Beyond a doubt the Rhinelander, born in America, had required to think before he had been sure of the date of Washington's birthday.

"Martin," said Essenberg, "is under a vow to speak no unnecessary word until Ireland is free from the oppression of Britain.'

England, you mean," said Foster, airily.

The other spread his hands in a gesture of despair.

"Let us order lunch," he said.

And he ordered lunch to some purpose: for Foster, Farrell and himself in the library, and for the others, in spite of

Foster's protest, in the dining-room.
"Nothing is too good," was his comment, "for the British sailor. And do not forget, Pierre, to send a basket and a bottle to the three men in the boat. In good time, here comes Mr. Farrell. An intelligent young man, I should judge. "Except," Foster drawled, "that he can-

not get rid of the suspicion that he has learned more about this patrol business in a week than I have in three months. He would have me shot and half the population of Mainland arrested in two days if he had a free hand. Youth is a very un-comfortable complaint."

OR news was written on the midshipman's face-news that might be more welcome if less publicly announced: and

Foster believed in going a cable's length to meet a possible emergency.
"Anything to report,
Mr. Farrell?"

"All well, sir. But MacLeod says there used to be a blow-hole where the west corner of the garden is now. leading down to a small cave at half-tide level. The cave ran about ten fathoms into the rock twelve years ago, and the blow-hole was about a foot wide. They ought to have been quite a bit bigger now, through the strong tides and the storms — or even the whole cliff broken down from the blow-hole seaward. We couldn't see the cave because the cliff overhangs; but the cliff is there and the hole gone."

"Thank you, Mr. Farrell. Have you any explanation of its disappearance?"

Farrell had. Indeed, Farrell had been feeling that his big chance had come. But the slightly accentuated indifference of Foster's manner, recalling his experience of the morning, struck his enthusiasm like a cold douche. With a re-



bellious heart, therefore, but a fairly level head, he answered: "I leave that

to you sir."

"Are you sure that it is a wise thing to do, Mr. Farrell?"

"No, sir," flashed Farrell, with

spirit.

"Smith," cried Foster, wheeling on the big A.B., "what the Fiery Furnace are you sniggering about? You are detailed to carry lunch to the boat guard."

"Now then, MacLeod," he continued, turning to a fisherman among his men, "do these blow-holes ever get filled up?"

"No, sir; they always get bigger. I've seen the water forced up thirty feet above ground through that one with a west wind. It was wearing out quicker than most, too. A man's lifetime does not make much difference to some of them; but I expected to see that voe a hundred yards further inland if ever I came here again."

The "voe" he referred to was a tiny bay on which the cave, which Farrell had mentioned, had opened; and the phenomenon of the blow-hole was a common enough thing in those islands. Tunnels have been bored right through headlands of solid rock and deep into mighty cliffs by the wild waters of the coasts of Thule, and not infrequently the hammering seas burst a way upward from cave to open

"A ND five per cent. of my best pas-Essenberg broke in upon the fisherman's explanation with some warmth. "No, sir! Old Neptune doesn't put anything like that over a live man. Papa Chrom is just small enough to suit me as it is. And that darned salt-water geyser didn't do my garden good, anyway. So I just choked it off. The hole is in the corner of the garden, a rod from the fence, with twenty tons of boulders and a load of Portland cement down it. And the cave is filled with rubble and faced with a re-inforced concrete wall two feet below low water and ten feet above high. That, sir, is the way in which a citizen of the United States handles a little problem of this kind. And, now the mystery is solved, I shall be glad to have the official view as to whether I have taken an unwarrantable liberty with his Britannic Majesty's

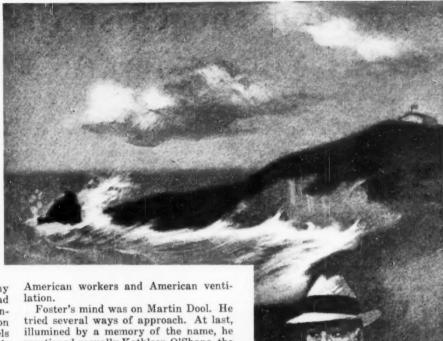
Island of Papa Chrom or not."

"The court," said the sub-lieutenant,
"will adjourn for lunch."

M ARTIN DOOL waited on the three in the library, speaking not a word. Foster took a covert interest in the man. His hands were brown and roughened; but they were not quite the hands of a gardener. His untamed eye was that of a genius, not of a serf. Foster inquired about the rest of the staff. They numbered five, Essenberg said: the other gardener, a stockman, Pierre the cook, and an electrician and his assistant.

"All of them but Martin," he added, "I brought with me from the States. And I pay 'em all American wages. I only want necessary service when Mrs. Essenberg is away; but it has to be the best."

And he wandered off in praise of



mentioned casually Kathleen O'Shane, the great Irish-American actress. He had met her in the days when he was not a naval volunteer. Dool paused in his serving at the name and Foster caught a quick glance from Essenberg to his man. It sufficed; but it was a look of warning, not the rebuke of an employer. He dropped the subject after saying that he had met the lady not very long ago.

He returned to the topic of the blow-hole. badgering Farrell, and at length request-ing him to get the hole located and to see it dug out until he was satisfied that the rocks and the cement were really there. Farrell was not at all pleased. Not without reason, he found Foster a very un-

pleasant man to work with.
"I have no doubt," said Foster, "that Mr. Essenberg will take me round in the

boat to see his concrete wall."
"By all means," agreed his host, "the minute the tide is high enough to get out of the harbor; and if you are serious about the digging, I'll lend you a couple

of men."
"I am," said Foster with a yawn, "in deadly earnest."

"Go you to this foolish digging, Mr. Essenberg." Martin Dool broke silence at last. "As for the wall at the cave, there is a way down by the north cliff from which it may be seen if he will go with me."

And so it was arranged.

 ${
m D}_{
m officer}^{
m OOL}$  spoke no more until he and the officer stood on a narrow ribbon of sand at the north side of the western voe, within a stonethrow of a sheer wall of concrete, not so much "re-inforced" as framed and latticed with iron girders painted grey. It was invisible from any point of land save this barely accessible strip of sand, and was screened from the sea by a needle of rock fronting the tiny bay, round which the flowing tide tore and leapt viciously. In the bay the water was calm, but Foster's eye failed to plumb its depth. He found himself on the brink

The owner of Papa Chrom, whose round figure was making leisurely progress down a path. A fair round welcome and the reek of an excellent cigar were borne on the breeze.

of bigger things than he had quite anticipated.

"A very pretty piece of work," he said, turning as though to leave.

"You were speaking of Kathleen O'Shane," said Dool, standing between Foster and the precarious ascent.
"I knew her," replied Foster simply.

"Her other name?"

"Norah Dool."

"She was my cousin." "And a Catholic. Therefore you did

not marry her." "Therefore she would not marry me. I would have gone through the flames of hell for her. But she was a good girl, and

my cousin, as you say."
"The relationship will be a great comfort to her."

Continued on Page 101.

# Lowering the Cost of Life-Saving

THIS is the story of an achievement, an achievement which will mean

By DR. GORDON BATES

every child suffering from the disease would die. But every child, even if untreated does not die. The conclusion

life and health to many, many Canadian children. It is the tale of how a great life-saving product came to be made by a university—an institution whose usual business, as everyone knows is to develop the youthful mind. How the University of Toronto departed from its old traditions, became a manufacturer, and performed a great public service is a matter of unrecorded history. Or at least it was until this article was written.

To put the matter in a nut-shell, the University of Toronto, in addition to her usual activities is now making anti-toxin for diphtheria. More than that she is selling it to the general public practically at cost.

To understand what diphtheria anti-toxin is and the wonderful results attained with it one must first know something of diphtheria. For the benefit of those few people who have not actually seen or heard of some little toddler who has had it, it must merit some description. Briefly, diphtheria is an infection developing in one's throat. It affects especially the pharynx or larynx, is intensely contagious and very fatal.

Before the introduction of anti-toxin it is said that out of every three children attacked, one died.

But one has only to talk to a doctor who practised twenty-five years ago to know something about it. He can tell you of seeing whole families, father and mother included, wiped out by the dread disease. If his evidence is not enough, go to a cemetery—any cemetery will do—and in some corner you will find a monument pregnant with tragedy—bearing an inscription more pathetic than that of any other monument.

Perhaps it will read something like this:

1877 Julian Brown April 1882

1879 Annie Brown April 1882

1879 Ada Brown April 1882

and in the absence of some dreadful accident or perhaps scarlet fever, diphtheria was the cause of that inscription.

The first step in the fight against the ghoulish disease which stalked about the country picking out children for its victims was the discovery that it was caused by a definite bacillus.

#### THE CAUSE OF DIPHTHERIA.

In other words a tiny organism of a definite shape and character was always present with the disease and might cause it again if transplanted into another child's throat. Sometimes under the microscope it looks like an Indian club, sometimes like a miniature dumbbell, sometimes like a barred rod. But look at the accompanying illustration and you will see something of its appearance for yourself.

Then the mode of action of this tiny but vicious organism was worked out. It came from the throat of a person with diphtheria to the throat of its victim.



Above: The spinal cord of a rabies-injected rabbit being dried. The cord, as it dries, loses its virulence. The white substance in the bottom of the jar is sodium hyderoxide Below: The filling of anti-toxin into vials and syringes is undertaken with all the precaution characteristic of the operating room.

There it lodged and by rapidly multiplying itself formed a scum or membrane. Then firmly entrenched, it let free a poison which, loose in the blood, did its deadly work in all parts of the body. This substance called diphtheria toxin or literally poison did particular damage to heart muscle and was responsible for a large percentage of deaths from diphtheria.

Had the human body no means of protecting itself against diphtheria, of course

was that the child must to some extent fight the disease and sometimes successfully. In other words, in the child's blood there is manufactured an anti-toxin which renders the toxin poured out by the diphtheria bacillus inert and harmless. If this were so, the question immediately arose as to whether this protective substance could be produced in the blood of some animal and utilized to cure diphtheria in the human being.

It was found that diphtheria toxin could be produced by growing the diphtheria bacillus in bouillon or ordinary clear meat broth. It was then found that if this toxin was injected under the skin of a horse the horse would produce an anti-toxin just as efficient as that produced in the blood of a child. These facts though stated so briefly here were, of course, only proved after a great many experiments.

In the preparation of anti-toxin, then, the first step is the production of toxin. This is done by taking a culture of the diphtheria bacillus originally obtained from some patient's throat and transferring it to flasks of meat broth. These flasks are put in an incubator just like a chicken incubator for a week. At the end of this time when the diphtheria bacilli have multiplied to many million times their original number a quantity of carbolic acid is added and the flasks let stand over night. Next morning the bacilli are dead. The broth is filtered to remove this dead debris. There is left a clear sparkling solution of intensely poisonous diphtheria toxin.

This substance (at first less than one drop) is then injected beneath the skin of a horse by means of a hypodermic needle. Even this tiny quantity may make the horse very ill. However, he is given a few days to recover. Then he is given a little larger dose and perhaps even so early as this he is able to resist the poison to such an extent that the increased dose will not affect him at all. Then the dose is repeated, each time a little larger-and againuntil at the end of eight weeks half a pint, sufficient to kill many horses outright is taken with hardly any discomfort. It has been calculated that a horse just able to tolerate a dose of toxin sufficient to kill ten guinea-pigs will at the end of his treatment be able to withstand, at one dose, sufficient to kill no less than 50,000 guinea-pigs or twenty untreated horses.

Then after the horse's blood has been examined for the presence of anti-toxin he is bled. Several gallons of blood are received into sterile containers and the corpuscles or red part of the blood allowed to settle out. The clear part is then siphoned off; the red part at the bottom of the containers is thrown away.

A further stage of the work is then entered on. The blood serum was formerly thought to be the purest form in which anti-toxin could be obtained. One of its



disadvantages was that if a large dose were given it meant that a disagreeably large volume of fluid must be forced under the patient's skin. And since "getting under one's skin" is a disagreeable process at any time a method was found of decreasing the volume of fluid in which a given amount of anti-toxin could be found.

Anti-toxin is found only in the globulin of the blood. This substance can be removed by means of adding ammonium sulphate which coagulates or precipitates globulin. This substance is added then and the resultant milky mixture is filtered. The anti-toxin is now in the form of a white soggy mass. This substance by a series of adroit moves is transferred to parchment bags, and suspended in running water for a week. At the end of this time the ammonium sulphate has escaped through the porous wall of the bag and pure globulin containing the concentrated anti-toxin remains. After being forced through a porcelain filter to remove all

traces of bacterial infection an antiseptic is added and we have the pure antitoxin of medicine and commerce in bulk, a series of glass jars containing a clean-looking opalescent liquid ready to be filled into suitable small containers.

The strength of the anti-toxin is estimated in an ingenious waypractically terms of guinea-pigs. First it is found how much toxin it takes to kill a guinea-pig of a definite weight. Then by means of dosing a number of guinea-pigs with just enough toxin to kill, mixed with varying quantities of antitoxin, the quan-tity of anti-toxin found which will just save its life. A hundred times this amount is called a unit and the strength and dosage of anti-toxin is always quoted in terms of units. So that when one hears that a child -yours or your neighbor's perhaps - has had ten or twenty thousand units of anti-toxin

to save the life of a guinea-pig condemned to die from a poisonous dose of diphtheria toxin.

The final process is that of "filling," an operation carried out with the most scrupulous care and cleanliness. Step into the University anti-toxin laboratory on any filling day and you can see for your-The assistant in charge of this work sits before a glass cabinet, visored and armored in sterile mask, cap and gown, gauntleted in sterile rubber gloves like a veritable knight of the operating room. And with all the careful aseptic precautions of the operating-room observed to the letter, thousands of sparkling syringes and vials are filled with antitoxin, ready to be sent on their errand of mercy throughout the country.

This, then, is the work undertaken by the University of Toronto. A word will not be amiss here as to its importance indeed as to its necessity as a work of humanity. For anything which has so important a bearing on the life and health of the country's children must be so regarded.

Before the introduction of anti-toxin in 1894, diphtheria was of such virulence as to fully justify the gravest fear of death in an infected person. After the antitoxin began to be used the mortality fell immediately. An example of this may be found for instance in the case of Boston City Hospital where the death rate fell immediately from 46 per cent. to 12 per cent. To-day in Toronto Isolation Hospital in which anti-toxin is used on all cases immediately and in large doses the mortality is only six per cent. That is only one child in sixteen attacked dies. The child who dies is the one in whom anti-toxin is given too late to be of service-after the damage is done. In the city of Toronto at large-outside the hospital-where, of course anti-toxin may or may not be given-the death rate is 12 to 16 per cent.

The important thing to note about the anti-toxin question is that unfortunate-

ly, in the past, every child could not have it: the reason - it cost too much. Everyone realized that it cost a lot, especially the father and mother without money. The realization that save their child's life meant many thousands of units of antitoxin and - alas -perhaps twenty-five dollars which they did not have often meant the difference between life and death; while in milder cases where much less of the life-saving substance was needed the probable outcome was balanced against the anti-toxin and none was bought -with an equally lamentable sult. A story is told, a true story of a physician coming to a home in which two chil-

dren had diphtheria. There was money enough to pay for anti-toxin for one child but not for two. The parents decided which child should have the anti-toxin — the other died.

Many a doctor has gone down into his own pocket to pay for anti-toxin for poor patients. Some municipalities have looked after their poor. It took a man with vision, however to see that the price of anti-toxin was outrageously high and that



Above: Filtering the clear plasma of the horse's blood.

Centre: An important part of the manufacture of anti-toxin is the precipitation of the globulins which contains it. The clear fluid shown in the jars is useless. The anti-toxin is left in the form of a white soggy mass on the filter papers.

Below: The horse plays

Below: The horse plays an important part in the preparation of anti-toxins.

means that he has received one hundred or two hundred thousand times enough a reduction in price was not only more important than vicarious charity but possible.

This was Dr. J. G. Fitzgerald, the present director of the laboratory. Coming back from Berkeley where he had been associate professor in the University of California with ideas of public service

men have been sent out as would be the case with an ordinary drug company. But Doctors all over the country have been informed by letter and circular and have been forced to realize two facts. Firstly, that the university could not afford to back anti-toxin which is not good anti-toxin. Secondly, that the price has





Left: Diphtheria bacilli, and (right) tetanus bacilli as they appear through a microscope.

which he had been turning over in his mind for years, he immediately, on his own initiative and with his own money started an anti-toxin laboratory.

That meant buying stables, horses, guinea-pigs and apparatus of a variegated character. It meant spending time and money. He knew that selling against the various pharmaceutical companies, even at a rate much below theirs, he could make money—a mint of money for himself. But he knew too, that selling at a rate, much again below theirs, provided a large enough market were secured he could pay all laboratory expenses and at the same time put the life-saving antitoxin within reach of everyone—even the poorest.

First of all he put his laboratory on a paying basis. Then, with an assurance showing no respect for traditions he went to the university authorities and practically said, "Here is an opportunity for the University to do a great work. I ask for no profit from the laboratory I have started. Take it over and run it. You will save the lives of thousands of Canadian children every year."

Sir Edmund Osler, one of the Board of Governors was enthusiastic. So was President Falconer. In a short time the thing was accomplished. Dr. Fitzgerald was established as Associate Professor of Hygiene in the University and given headquarters in the north wing of the Medical Building in Queen's Park. The production of anti-toxin on a large scale was begun at once.

The collaboration of the Provincial Board of Health was secured, particularly for purposes of distribution. Through the hearty and enthusiastic cooperation of Dr. J. W. S. McCullough, chief officer of health for Ontario, health officers throughout Ontario were enlisted as supporters of the scheme. This made it possible for it at once to take definite form. Sales increased immediately and now at the end of a year the anti-toxin is sold in all parts of Canada from British Columbia to Newfoundland.

There are two reasons why the antitoxin had found a ready sale. No salesbeen so reduced that it is now within the reach of everyone.

Previously it was rare to find a company selling for less than \$1.00 per thousand units, and as much as \$6.00 is asked for a three thousand unit syringe package. Now the University of Toronto sells anti-toxin to all comers at a fraction over twenty cents per thousand units. In the former case the reduction is to one-fifth the amount asked by a private corporation, in the latter to about a tenth. And as the market increases the reduction in price will be greater. The market has increased already and many thousands of units are already sold daily. Undoubtedly lives are being saved in every community where it goes.

Someone has called the scheme a Biological Hydro Electric. Who can

compare the government ownership which gives us electricity to that which gives us our children's lives? There are certain things which must be exploited for the public good. Is it right that those things which have been freely given to the world the great Scientists who discovered them should not be open to all and that human beshould die ings for the lack of them? Well, Dr. Fitzgerald did not think so. The governors of the university did not think so-and it seems to me that no right thinking man should think so. Well, perhaps in the not far distant future someone who is reading this article will see a well loved child gasping for breath, clutching with futile hands at a terrible, stifling obstacle formed there by the dreadful diphtheria membrane—Then he will know what I mean.

This then has been the principal activity of the Department of Hygiene laboratories. The scope of the work has increased until now other biological products of the greatest importance are produced and sold practically for the cost of production. These include Pasteur Treatments, the typhoid vaccine so familiar to all of us since the beginning of the war, and last of all tetanus anti-toxin.

#### THE PASTEUR TREATMENT FOR RABIES.

The Pasteur treatment, as it is called, many will remember was one of the great discoveries of the famous Frenchman whose name it bears. Rabies the terrible disease which infects persons who are bitten by mad dogs is prevented by this method.

Rabies or hydrophobia is a disease affecting dogs, cats, cows and other animals. 'Mad dogs' particularly may produce the disease in human beings by biting them. Rabies is particularly dreaded because of the agonizing symptoms which it causes. The most remarkable one is the terrible spasm of the muscles of the larynx brought on by any attempt to drink. It is this which makes the patient fear the very sight of water and gives the name hydrophobia to the disease.

Pasteur found that by passing the virus of the diseases through a number of rabbits it gains greatly in virulence. This transmission is effected by inoculating one animal from a rabid dog, a second animal from the first, a third from the second and so on. If a number of rabbits

are inoculated from one to another in a series and then their spinal cords removed and exposed in glass jars rendered free from moisture by caustic potash they lose in virulence with each day of such exposure until after a period of fourteen days after death poisonous effect results from their injection into a healthy dog or rabbit. The injection of fresh spinal cord from a rabies-infected rabbit will produce rabies and death in a very short time.

If now inoculation of healthy rabbits with the dried rabbit's Continued on Page 103.



Dr. J. G. Fitzgerald, who originated the idea, and who is director of the University laboratory.

# Victor From Vanquished Issues

T was not until Ste-phen St. John rose to announce his text By L. M. MONTGOMERY

HUNTER Illustrated MARY

that he saw Judith Allen. He had never seen her before, but he knew there could be only one woman in Lynndale answering to the description of the stranger in the Blakeley pew. He squared his shoulders involuntarily. His sermon was a good one and he had a little natural pride in it, but the presence of this girl made him

a stimulus. She represented a world whose criticism he hoped to challenge some day in other pulpits than that of Lynndale.

He had heard her called beautiful, and he now realized that she was. Even at that moment he

felt quite sure that Judith Allen surpassed all women he had ever seen. May Willetts, sitting directbeneath him, with her soft-blue eyes lifted to his face, and an aureole of fluffy, pale-gold hair about her child-like head, was very pretty; and Marcella Barry, the Lynndale school - teacher, who sat behind him

in the choir and was the only real woman friend he had in Lynndale, was handsome. But their beauty seemed an altogether different thing from Judith Allen's.

There was but one listener for Stephen St. John in Lynndale church that morning. He had an indefinable sense that he was being put to the test, and he acquitted himself like a man.

After the sermon, while the collection was being taken up, Marcella Barry sang a solo. She had a fine, though untrained, voice. For once Stephen St. John did not hear her. He could not see Judith Allen from where he sat, but he seemed to see her-the long, mobile, colorless face under the large, modish hat, the folds of black hair, the luminous eyes, the slightly, over-full, rose-red lips, the proud, yet fine, carriage of head and shoulders, the knot of pale heliotrope and maiden-hair at the breast of her grey gown.

When the service was over he went swiftly down the pulpit steps. It was his habit to move down the aisle among his people, giving and receiving simple, kindly greetings. Mrs. Blakeley was waiting at the entrance of her pew, ready to

pounce on him. She was a member of the Lynndale Methodist Church and was prominent in all its work; nevertheless, she was considered barely orthodox, and was suspected of a chronic hankering after the pomps and vanities of the world, as instanced by her much-paraded in-timacy with the Allens. Just now she was beaming effusively as she put her plump, kid-gloved hand into Stephen's. But he did not see the fussy, over-dressed little woman before him-he was looking past her at Judith Allen. The latter was talking to her father, who had sat beside her during the service. He was a handsome, fresh-faced old man, with a general air of worldly prosperity about him.

Beyond the Allens the June sunlight was turning May Willett's head into a blur of misty gold; still further back Marcella Barry was talking to the Sunday School superintendent, but watching the tableau at the Blakeley pew with a somewhat sarcastic curve of her clever mouth.

Mrs. Blakeley had stepped aside, with her hand still on Stephen's black arm. He was face to face with Judith Allen and heard, as in a dream, Mrs. Blakeley's conventional murmur of introduction. The girl bowed

somewhat coldly, but Mr. Allen shook his hand heartily and said something about the sermon which Stephen hardly heeded. He was watching Judith moving down the aisle before them: she was taller than the women about her, and her dark hair shone with a kind of metallic lustre as she passed

through the streamers of crimson and blue and orange light, that fell across the church.

Mr. Allen talked in his brisk, cultured tone until they reached the door. Old Dan Warfield, who had the soul of a saint in a warped, unbeautiful body, was waiting there for the minister with a tale about some destitute family over at West Lynndale. Stephen had to step a side and listen. When the story was told most of the people were gone. The janitor was carrying the Sunday School hymnals into the vestry, and Marcella Barry was going out of the door with her choir books under her arm. Stephen followed her and took them from her; he boarded where she did.

On the road home Marcella asked him, in her usual straightforward fashion, if he did not think Miss Allen very beautiful.

"Very," was the brief response. "I think her face is the most beautiful I have ever seen in art or life," continued Marcella calmly. "There is something very uncommon about it. And Judith "There is something

Allen is an uncommon woman."
"Do you know her?" Stephen asked the question awkwardly. For some indefinable reason it was an effort for him to speak of Judith Allen, particularly to Marcella Barry.

Marcella gave a slight shrug of her

shapely shoulders.
"Not in the sense you mean. I have met her once or twice. But there is a great difference between Judith Allen and the Lynndale school teacher. Not," she added hastily, "that there is anything of the snob about Miss Allen or that she made me feel the difference. On the contrary, she quite effaced it for the time being. But her world is a different one from mine."

She might also have added, "and from yours as well." But Stephen's own consciousness filled it in. An unusual silence fell between them as they walked down the long, sloping road, basking in the prodigal



sunshine. Before them, on the summit of a little hill, was the farm house where they boarded, half screened from sight by blossoming apple trees. Away to the right, among fine old elms, was "Glenwood," where the Allens lived. Stephen St. John looked across at Judith Allen's home and thought, with a sharp, impatient pang, that there could be little or nothing in common between Gerard Allen's daughter and the insignificant minister-elect in charge of the Methodist circuit of Lynndale.

Stephen St. John had taken his bachelor degree in the preceding spring. His destination being the ministry, he had been sent to take charge of the Lynndale circuit until college should re-open. With his ability and attainments he might have expected a better station for the summer than the straggling one at Lynndale, but he had thrown himself into its work, heart

and soul.

He was young and enthusiastic, filled with a keen delight in living and in the problems of life which he must solve. It was not often that the Lynndale Methodists had such a man sent them. Commonly they had to be content with feeble creatures, whom the stationing committee could not send to wealthier and more critical circuits. Stephen St. John was a marvel to their simple souls. His fame as a preacher spread through the surrounding districts and filled the small church to over-flowing every Sunday. In a local way he was a celebrity.

Out of the pulpit his people liked him personally. They liked his youth and his eagerness, his unfeigned interest in their narrow lives, and a certain fine, spiritual quality in the man himself of which he was quite unconscious. Stephen St. John was a success on the Lynndale circuit and he had been satisfied until he had seen Judith Allen's face in the Methodist Church that

morning.

Then, all at once, he became conscious of a certain weariness of, and distaste for, his work. He thought she must hold it in contempt, and that he himself must share in that contempt for having occupied himself with it-that little round of Sunday services, ill-attended weekly prayer meetings, and unvarying pastoral calls. He felt a feverish longing to prove to her that there were greater things in him than were called out on the Lynndale circuit. He despised himself for these feelings, but he could not subdue them, moreover, there stirred imperiously within him a keen desire for the world in which Judith Allen lived, where he might meet his peers and match his intellect with worthy competitors, and drink into his soul the beauty and refinement of thought and environment that his nature craved.

And all this, as he told himself contemptously, all this disquiet and revolt had come from the mere glimpse of a woman's face—a woman who knew and cared noth-

ing about him or his work!

Sunday School was irksome to him that afternoon, and May Willetts cried her blue, innocent eyes half out when she went home because he had forgotten to speak to her. Some of the kindly, simple-hearted Lynndale folk had thought that the young minister might marry May Willetts. Others thought he liked Marcella Barry.

But Marcella Barry, at least, was discerning enough to see, and had seen, from the moment that Stephen St. John had looked into Judith Allen's eyes at their meeting, that he would never care for her now. She taught her Sunday School class calmly, in spite of her heartache, and went home after it without waiting for Stephen. Life held a great deal for Marcella Barry. She did not choose to waste any of it in a hopeless effort to win the love of a man over whom Judith Allen had cast the glamor of her beauty.

Stephen did not even miss Marcella. But that evening the service seemed to him empty and meaningless because there was no critical, highly-responsive face in

the Blakelev pew.

L YNNDALE was a gossipy place and gossip filtered through all its social tissues with marvelous rapidity. Hence, the family with whom Stephen boarded soon knew, and contrived that he should know, the effect that he had produced on the Allens. Mr. Allen was reported to have said that he was really astonished—that the young fellow the Methodists had got on their circuit seemed remarkably clever. The Lynndale people rolled this as a sweet morsel under their tongues, for it was not often the Allens, who were Anglicans, favored their "supplies" with any notice whatever.

The next week Gerard Allen called on Stephen, and the latter found himself accepting an invitation to tea at Glenwood on the following day. Marcella Barry, coming home from school, met Stephen showing his caller out. An odd smile crossed the girl's lips, as she noted the illumination on the young man's face; then something like pity revealed itself in her fine, hazel eyes. This young Methodist "supply" was half in love with Judith Allen already. If he met her again he would be wholly so; and Marcella, knowing what the Allens were, honestly thought that Stephen St. John might as well fall in love with a duchess and have done with it.

Stephen would not admit, even to himself, how happy he was. He tried to make himself believe that he was pleased because an invitation from such a source was a mark of the intellectual approval with which Mr. Allen regarded him; but deep down in his heart he knew it was because he would see Judith again.

When he went to Glenwood the next evening he found he was not the only guest. The rector of St. Mary's was there from Outport, evidently asked to meet him on the birds-of-a-feather principle, and the young doctor from West Lynndale. Also a noted lecturer and the principal of the Outport Academy were present, together with two or three pretty, fluffy Outport girls and the principal's fat, motherly wife.

Stephen had never seen Mrs. Allen before. He knew now where Judith got her beauty, for her mother was strikingly handsome, and, as he felt, a woman of the world to her very finger tips. Judith herself seemed even more beautiful than when he had seen her in church, and her manner was distinctly cordial as she gave him her cool, slender hand in greeting.

Stephen was thoroughly at his ease.

The law of elective affinity works everywhere, and in all conditions of life. The society in which he found himself was his natural element. He knew quite well that he was being weighed in the balance from a social standpoint, and the knowledge put him on his mettle. The dull, pompous, good-natured rector, the brilliant and satirical lecturer, and the clever professor were surprised to find that this pale student, with the high brow and fine dark eyes, was more than a match for them. All present felt the charm of his personality. Mr. Allen was frankly delighted with him, and voiced his opinion to the rector when the younger people had gone out.

"A fine young fellow that, don't you think? Clever, too! I took a notion to him when I heard him preach last Sunday. Judith had heard somewhere that he was a good speaker and wanted to hear him, so we went. Didn't expect much myself--had him pretty well sized up in my mind, as I thought-flabby, weak-eyed, weaker-brained-just what the men they usually get on that circuit are. I assure you I was agreeably surprised. He doesn't know himself how clever he is by half. It's a marvel he was ever sent to a circuit like Lynndale—a positive casting of pearls before swine. I don't see how a man of his calibre can stand it. But the people hereabouts seem to worship him. Judith fancied him, too-and she's rather critical."

When Stephen went home that night he was conscious of a certain wine-like exhilaration, resulting from his contact with cultivated minds. He knew quite well that he had made a favorable impression on all whom he had met at Glenwood. Mr. Allen had proffered him a standing invitation to call, and Judith herself had repeated it as bade him good-night. His hand thrilled yet with the gentle pressure of hers. He recalled her low, clear voice and the sweetly-grave glance of her eyes with an indefinable delight. Her beauty was great, but the subtle charm which had captivated his fastidious admiration was altogether apart from the mere loveliness of feature and coloring.

In his soul he questioned the wisdom of cultivating an intimacy with the Allens, even while he knew quite well that he meant to cultivate it. True, their environment was refined and cultured and sensuously beautiful, but it was also worldly to the last degree. There was literally no soul-growth possible in it—there might even be soul stifling. Stephen could not deny to himself that the Lynndale people and his circuit duties did not seem any more attractive from his afternoon at

Glenwood.

Judith, too! Stephen was too much of a man, in spite of the spell that was on him, not to see with more or less clearness that there was danger for him here. It would not do for any man, poor in this world's goods and entering on a career that promised little increase of the same, to set his heart on a woman like Judith Allen. The very absurdity of the thing seemed to him his best safeguard. A beautiful friendship was being frankly offered him; he had no mind to reject because a possible peril lurked in it.

As he walked along, alone in the darkness of the night, Judith's face shone be-





fore him like a star of inspiration. He wrote his sermon the next day as if she were to pass judgment on every thought and expression. He did not expect that she would be present to hear it, but it seemed to him that thenceforth, as long as life lasted, everything he might ever write or utter must be judged by the standard of what she would think of it. It almost alarmed him to find how suddenly and completely the thought of her dominated his inner life. He found difficulty in fitting himself into his old groove again, as if his recent expansion had left him too large for it. The homely words and ways of his people jarred on him. Even Marcella Barry, whose face he had thought beautiful and whose intellect he admired, seemed brusque and uninteresting. She was, perhaps, more clever than Judith Allen, she might even be the nobler woman, but for Stephen St. John she had become an impossibility. All friendship with her was over. Judith Allen was not the woman to reign over a divided kingdom. Lynndale gossip, like most gossip, was imaginative. When it became evident that the Allens had taken up the young minister in all seriousness the matter was much talked of. Some of the Methodists, such as Mrs. Blakeley, were pleased; but the majority disapproved. They thought there should be no compromise between a preacher of the gospel and the world, as represented by the Allens and their Outport friends. Stephen was now a frequent and welcome visitor at Glenwood. He met many people there and drank deeply of the cup of enchantment proffered him. Every visit he made separated him a little further from the Lynndale circuit. His sermons were more brilliant and scholarly, his general outlook on life wider and more liberal; but old Mrs. Jones complained that "his prayers didn't seem to do her as much good nohow—they seemed to be kind of put on from the outside," and the Lynndale people felt, without being able to define their feelings, that their minister was not as near to them as he had been.

Stephen knew it and felt it, too. With all his efforts he could not take the same single-minded interest in his work as before. An hour in the atmosphere of Judith's home left him feeling out of joint with himself and his once cherished aims. He realized that there was something wrong in this, and in his consequent irritation he tried to shift the blame on his people. They were so narrow and crude, even in their religion, he told himself, that he could not feel at home among them. At times he was even inclined to laugh at them and their literalness.

It was a shock to him, in spite of all this, when he discovered that he loved Judith Allen, although at the same time it seemed to him absurd that he had ever thought it possible to do anything else. By this time also, he had come into the subtle knowledge that even here the way was open for him. He could, if he so elected, win Judith Allen. But at what cost?

Mr. Allen had never in any way discouraged his daughter's friendship with Stephen, but there had always been a faint undercurrent of reservation, and the

whole influence of Glenwood tended to open out new vistas before him and close the old. Stephen had at all times an uneasy sense that he was trifling with temptation and so losing strength for a dimly foreseen struggle in the future.

There came an evening when Gerard Allen put into careful, suggestive words the subtle thought that had long been the mainspring of action. Stephen was at Glenwood, and both men were sitting at dusk in the library, the long, exquisite room which Stephen loved because it was so suggestive of Judith. It had been her especial creation and every article in it spoke eloquently of her.

Opposite Stephen Mr. Allen's fine, massive old head came out against the mellow bindings of the books on the walls. From one of the other rooms came the faint tinkle of a zither—probably Judith was the player.

"I suppose you return to college next month, Mr. St. John," said Mr. Allen after a long silence in which Stephen had been thinking of a hundred irrelevant matters. "Have you definitely decided to enter the ministry of the Methodist Church?"

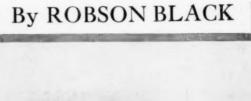
"I think so," said Stephen uncertainly. Mr. Allen bent forward and folded his arms upon the table.

"My dear fellow, I hope you will allow me to speak frankly to you, as one man to another. I have no son of my own, but if I had and if he were like you I would feel proud of him. In all frankness, therefore, I tell you that I think you are doing

Continued on Page 81.

# The Forests and the Fire-Thief





Left: A fire ranger driving his velocipede on the Canadian Northern Railway. These men receive \$1.75 per day and provide their own board. All the main railways now use these patrol men, and to excellent effect

effect.
Centre: In the Clear Water Forest, Rocky Mountains. Two rangers are seen on a lookout peak, from which their glasses sweep a great area of forest.

Right: Showing a ploughed fire-guard and telephone lines which the rangers have built to frustrate fires.



SETTLER on one of our limits," remarked Senator W. C. Edwards, of Ottawa, during a debate on the mischief of forest fires, "set ablaze a piece of woods to clear his ground for five bushels of potatoes. Five bushels of potatoes, mark you! And before his fire got itself stopped, he had burned down three million dollars' worth of pine."

Senator Edwards' tale, which his wide

Senator Edwards' tale, which his wide knowledge could multiply into a hundred more, amounts to an allegory blanketing the whole case of the Canadian forests and their utilization as a general asset. Always and ever, it is somebody's bushel of potatoes against the nation's three-millions-of-pine.

This hour of the country's history is ringing with petitions for more production, for individual retrenchment, for patronage of home industry. The purpose of the agricultural campaign, it is assumed, is to modify the effects of the war drain by creating new capital from the soil. Whatever the campaign, the object is to turn the eyes of the people to the sources of permanent prosperity beside their own doorsteps, to cause them to examine the economic future of the country with loyalty and good judgment.

Yet, of the many voices directing the boom-tired people in the various directions of success, we have to hear of one who quit the commonplaces of agriculture, personal frugality, and home patronage and pinned his faith to the Canadian forest—the one resource of overwhelming and immediate importance in any scheme of reconstruction and advancement.

Suppose that Canada in this long lane of uncertainty should read a page from the catalogue of her enemies! Suppose that Canada should lay hold of the fact that the treasury of the German nation has been filled with revenues acquired not in a bulge of wheat production but in the scientific cultivation of the forests. Canada, with her 500,000,000 acres of woodlands, holds in the hollow of her hand a means of public enrichment big enough to

abolish the national debt, bank up the federal and provincial revenues, give quittance to special tariff and stamp taxes, and liberally ease the imposts from all municipalities and persons. Here we have the problem of more production more than half solved. The crop is planted, enough crop to furnish the nation for all time to come, if cared for. It demands no bank credits, no railroad bonuses—very few indeed of the vexing and costly preliminaries to the extension of any other crop our land can raise. But it does need something—and we shall see.

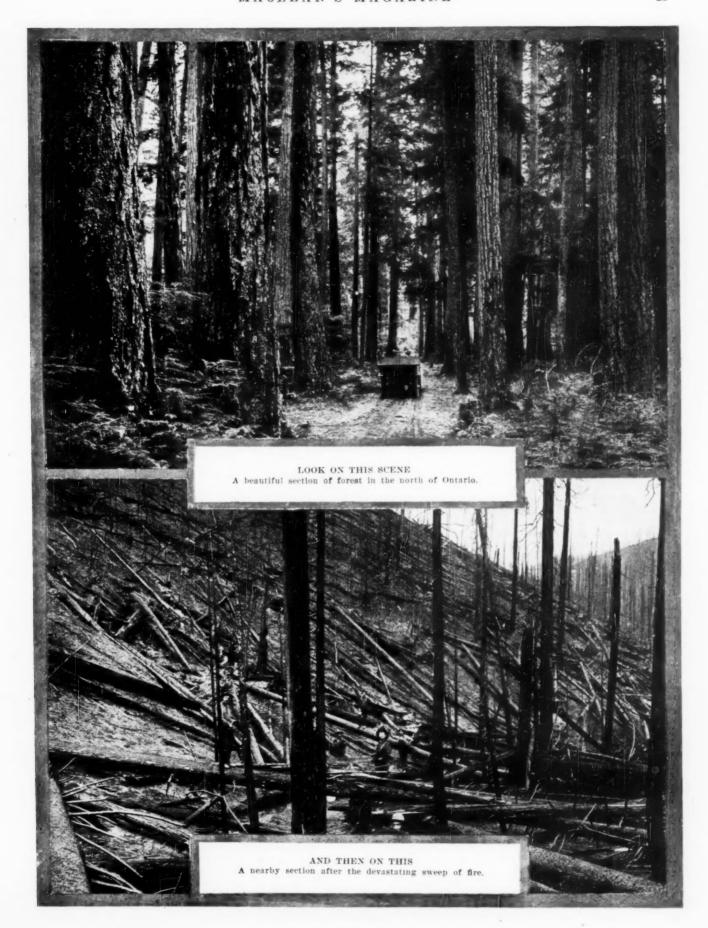
Germany takes an annual toll from her woodlands of \$190,000,000. Canada, with fourteen times as much forest area (although not worth fourteen times as much) gets about \$172,000,000 a year in lumber, pulpwood and other products, not including firewood. The discrepancy between the Prussian returns and those of Canada is actually much greater than appears in the figures given, inasmuch as the Can-adian wood crop is mostly an impairment of capital, while that of the European nation is entirely a natural increment. The Canadian forest loses in capital value with every crop taken out, while the forests of Germany are harvested like a barley field, with the additional distinction that millions are added to the future while taking millions for the present.

H OW Germany built her enormous forest revenues from lands unfitted for agriculture is a story in itself, the point of immediate importance being that the same forestry policy is applicable under our own methods in this country and the same building-up of high public revenues is wide open to any Government caring to break from tame traditions and to substitute initiative for immobility.

A rejoinder is almost certain: "The forests have been given away; they are no longer the people's business." The forests have not been "given away," except to the degree that leases cover a substantial part of our woodlands, and leases

are in some provinces virtually perpetual. Ninety-eight per cent. of the forest lands of the Dominion are still retained in the name of the public, and while such ownership does not produce startling profits, the imposts attached to timber leases make a very appreciable contribution to the cost of provincial government. From this source, Ontario receives about two million dollars a year. Practically the whole machinery of the British Columbia Government is driven by lumbering dues. In New Brunswick the reliance upon this source is about as absolute, and Quebec would need an entire set of fresh taxes were it not for the money from woodland leaseholders.

WHAT is the significance of this public ownership of the timber lands if the timber on those lands is partly under lease? The United States could supply an eloquent answer. There, four-fifths of the public lands under timber have passed by various devices into the absolute control of companies and individuals. Governments may wish to enforce policies in the public interest but meet with the seven-barred gate of the private preserve. It is different here. The Ontario Government, for instance, renews the leases of lumbermen once a year. It lies within that Government's power to make those renewals conditional upon obedience to regulations governing such things as the maintenance of fire rangers, just as it is within a Government's power to scale up the stumpage dues from time to time so as to take toll of the increment in value of the standing timber. Not only is it a matter of power to do, but every few years sees an upward adjustment of the lumberman's contribution to the state revenues. Before every other advantage, however, the existing public ownership of forest lands places the future disposal of the country's timber resources absolutely within the control of the citizen majority. If the people ask that the forests be harnessed, as Niagara was harnessed, to contribute



more fully to the public comfort and economy, "private interests" present a blocking power of no very formidable character.

As Canada's position is to-day, public operation of the forests-along the

French and Prussian plan—is too much to expect. It would require a continuity in the policies of administrations which does not now exist. Then why speak of the need for governmental action in forest conservation if it means only a petty sharing of the timber assets with the lumbering and pulpwood indus-

In the days of our past when governments were frail, private enterprise took liberal risks and made its own laws. The lumberman cut as he pleased—no diameter limit, no costs for fre rangers. Greater population brought two

blessings; it provided a market for the forest products and bestowed on governments new confidence and authority. The forests gradually loomed out of the thing 'wilderness" and took shape as an "asset." Restrictions were laid on the timber operator, advancing from year to year. Expert foresters applied their wits to the new complexity of interests and taught us the meaning of forest exhaustion, loss by fire, and the secret of perpetuity. Surveys knocked the stuffing from our notions of "boundless forests" and told the truth of an actually limited and fast-diminishing supply. Public interest was stimulated and sober concern aroused. Confidence in the public ability to maintain and manthis immense source of wealth took root in the knowledge that the forest lands were still owned by the state. To-day we have a rapidly advancing sentiment insisting upon leadership and impatient for better governmental recognition. This new interest in the business-end of forestry takes the point of view that while lumbering industries are and will continue to be indispensable, the lumberman's system of the past paid little or no heed to the future. When a Canadian forest comes down, it usually stays down, or rises in a mauled condition. The remedy is not in ousting the lumberman, the synonym of present use, but in linking to him the resource and wisdom and authority of the Government, the trustee of present and future.

D URING the next few years when the forest steps into its rightful leadership as the greatest wealth-producer of

all the natural capital we possess (already fifty million dollars ahead of the annual wheat crop), when political parties found their appeals for office upon their zeal in forest development, we shall understand then how true was the call of



The graveyard of a splendid forest in British Columbia. The smoke which clouds he picture is from a second or third fire. This area has been swept by flames gain and again, until the ground will produce only stunted poplars and ferus.

1915 for scientific exploitation of the forests before and above any other performance

If the forests of Canada are not contributing what they could to the wealth of the country, and the safety of the future, as has been claimed, what course does the expert forester prescribe? This is a point upon which the lumberman and forester have very resolute conclusions, sometimes differing widely. There is not room to take up more than one striking hypothesis of a noted Canadian engineer "The natural forest resources as we find it consists of an accumulated wood capital lying idle and waiting the hand of the rational manager to do his duty as a producer of a continuous highest revenue. The operations of the lumberman consist in a mere removal of the valuable portions of the growth, a cashing of the accumulated wood capital without the slightest reference to future revenues which might be derived from it in the shape of wood growth."

The writer believes with others, that the practice of the "predatory lumberman" has undergone substantial modification since 1903 when the above quotation was first placed in type. The evidence of a willingness to supersede the old-fashioned attitude towards forest protection may have been dictated by a scarcity of supplies, but is it asking too much to credit the lumberman with some patriotic reasonableness and receptiveness to new ideas?

The "theoretical" forester and the "practical" lumberman part company sometimes on questions of national econ-

omy, but there is one point where all join hands against a common foe. That junction is the peril of Fire.

This fact is blackboarded, and underlined by every friend of a permanent forest growth; we have lost our forests and

are losing them to-day not by cutting but by burning. One may reply that bad methods of cutting and logging cause much of the burning, but that point should not confuse the first statement. The use of the forests is not the prime cause their deplefor tion. Always we must come back to fire, and in so far as "conservation" fastens its propaganda to the riddance of that evil, the lumberman mounts the bandwagon with the trained forester.

The record of lost forests is one of the tragic stories of our history, contributing its load of distress and impoverishment to this and

future generations. You paid \$30 to \$40 a thousand for your last load of white pine. Did you stop to think that a hundred of our resolute grandfathers by a campaign for forest guardianship might have kept that pine bill down by 75 per cent.? Your furniture-maker paid \$500 for that single log of walnut. Who made cent.? that high price but the grandfathers around Chatham, Ontario, when they used walnut for firewood and toasted their toes over the flames of gold? "Our resources," said Sir Robert Borden, "are not the property of those who are living to-day but are the property of the nation as a whole. And the nation as a whole consists not only of those who are living but of those who have passed away and those who are yet to be born." That is what somebody called the "long distance view," a favorite species at the feasts of our rulers-much toasted, and usually

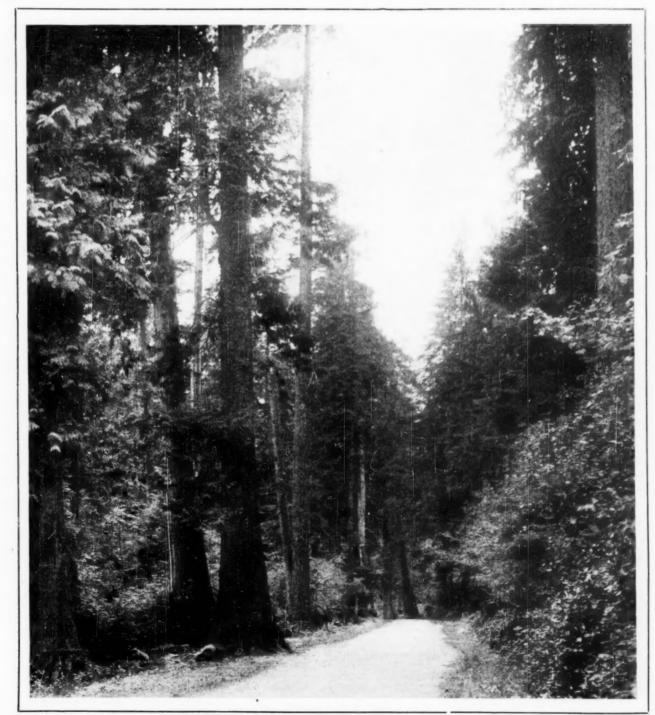
RULY the bills for the forest fires are coming in. There is no escaping payment. In British Columbia, forest surveyors sent out by the Forest Branch recently surveyed about 20,000,-000 acres of woodland and found that one-half of this area had been badly burned by fire in the last twenty-five years. Fine forests of Douglas fir, which once stood on the east slope of the Cascades, have been completely wiped out by fire, to be superseded by scrubby stands of jack pine of no merchantable value. The amount of forest fire losses in this area alone has been estimated at thirty billion feet of timber, or almost seven times the total lumber production of Canada in 1912. In Alberta, seventy-five per cent. of the forests on the east slope of the Rockies have been destroyed by fire with the result that very little useful timber remains to-day. The loss in Manitoba is on a similar plane and one could enumerate with fact and figure the holocausts which have stripped wide areas of Ontario again and again. Que-bec's position is no better. New Brunswick, particularly on the lines of the railways, has been severely dealt with; it was this province which supplied the greatest forest fire in American history, known as

the 'Miramichi disaster' of 1825, when in nine hours a belt of forest 80 miles long and 25 miles wide was reduced to ashes, six towns wiped out, 160 lives lost, 1,000 head of cattle killed, and almost all the game destroyed. One-fourth, or 1,986,000 acres, of the present forest area of Nova Scotia has been so severely burned that it is now semi-barren of commercial trees, and recent burns of over half a million acres are heading for the same helpless condition.

So, one sees, the orator's phrase of "limitless timber resources" is pure oratory. We have just one-quarter of the

merchantable timber possessed by the United States. Thirty years, in Sir Clif-ford Sifton's estimate, should remove, at the present pace of cutting and burning, the last logs from Ontario. Should the United States come to an end of its forests, to which it is religiously hurrying, all the trees in the Dominion would meet the American demand for just seven years. Since Confederation we have conducted a burnt sacrifice of at least six billion dollars' worth of first-class supplies. In other words, through a period of forty-eight years we have put 21 logs

Continued on Page 88.



The preservation of our forest wealth is a problem of deepest significance. From the standpoint of the lover of nature the question of fighting the fire-thief is one of moment.

# Heads and Heels: A Story of the Yukon

Stub RAYLEY was lifted by his collar three feet into the air and held there at the end of one of Bob Bruns'

By ROBERT E. PINKERTON
Illustrated by J. W. BEATTY

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mighty arms. The big man shook him gently.

"Out with it!" he commanded. "This is no time for your long-winded meanderin's. If it's up to me, tell me quick."

Stub did not answer, and he was lowered to the ground. Bob had long before learned that his brute force did not count with the little man.

"All right, Bruin," answered Stub when he was again on the trail. "Here it is. They've got Hen for this Cadoo shooting and Hen thinks they'll hang him sure to make an example of him and put an end to that sort of thing this side of the line."

"I know all that. How's it up to me?"
"I was approaching that subject when you interrupted me a moment ago. You and I know Hen was telling the truth when he explained how it happened. We've been partners too long to doubt that."

"Who says he isn't?" demanded Bruns with a growl.

"No one, exactly but, on the other hand, no one will believe his story, especially in a court of law."

"Damn their courts!" exploded the old sourdough. "Why didn't they keep out? We could have had this settled by now. These flatties and law sharps will ruin the country."

"The point is, they're here now, and they're in power."

"Well, what's your idea?"

"Hen saw Snellgrove shoot Cadoo. Hen was making a short cut down the river trail and strikes it at Cadoo's camp. Snellgrove and Sheets are just going by. Snellgrove never stops walking. He shoots Cadoo without missing a step. He's got no particular grudge against Cadoo, but the flatties have run him out of Fort Selkirk and it was a coward's fling at law and authority, just like the yellow, sure-thing gunfighter he is.

"Hen, even though Cadoo had said he would get him, is sore and yanks out his gat and lets fly at Snellgrove. Then he runs down to find Cadoo dead. And, while he's standing there, with one empty chamber in his gun, the lieutenant and three flatties come out on the creek trail and find him. There's nothing to that in a court, Bob, and they'll hang Hen sure,

unless—"

"Unless what? Where do I come in in a court?"

"You come in before the court. It's up to you, Bob, to save Hen."

The giant grasped the little man by the collar again and swung him high over a snowbank.

"Out with it!" he commanded.

But, as it always happened, Stub would not speak until he was lowered to the ground.

"Sheets saw Snellgrove kill Cadoo," he said calmly. "Sheets and Hen can swear to it together, clear Hen and convict Snellgrove."

"But they went down river and will be across the line. And, besides, these red coats don't know it."

"That's where you come in. You're going to start right now for Sheets and bring him back. Understand, Bob? Bring him back. It's the only thing that will save Hen, and you're the only man who can get him."

"I'll bring 'em both," was Bruns' determined comment as he started for their cabin.

"No, Sheets is enough. He's a weak sister that Snellgrove uses to do his dirty work, and he's scared stiff of the gunman. Snellgrove won't let him come, but you bring him, Bob. Keep after him if it takes a year. I'll do what I can for Hen here, but don't lose a minute."

A N hour later Bob Bruns, driving six dogs, started down river on the fast weakening ice. Stunned, helpless, in the face of so great an armed force as the soldiers presented, unaccustomed to the law and its ominous, leisurely operation, the big man had been dazed and inactive since Henry Crossin's arrest. Across the line, or the year before, there would have been only one way to settle the question, and it would have been settled without delay.

But Bob Bruns, a dog-whip in his hand, a task to perform, a hazardous, uncertain journey ahead of him, was another man. The slowness and heaviness vanished from his great body as he prepared for his departure. The lost, helpless expression of his face was replaced by hardened features. The despondency in his eyes was succeeded by a look of determination which only Stub fully understood.

The little man watched his partner from the bank, marveling, as he always did, that so great a man could have the lightness of foot of a Russian dancer. Then he turned back to the town, a silent, lone figure arrayed against the law of the Dominion, ready to exchange his life for that of his partner but at a loss as to how he could do so successfully.

THE Government wasted little time in bringing Cadoo to trial. It wished once and for all to rid the Canadian gold fields of the gunman and his work, to prevent that which was making the country to the west of the international boundary notorious.

Rayley employed the best lawyer he could find in the new settlement and, through him, sought delay. He knew that only by Bob Bruns' reappearance with Sheets could he hope to clear his friend.

And in Bob he had absolute faith. Weak, clumsy, inefficient, himself, he stood in an awe masked by flippant jests of the physical competence of the other.

But the prosecutor would not hear of delay. He laughed at the story that Snellgrove was the murderer and, ten days after the shooting, the case came to trial.

Crossin, cool, smiling at his friends, interested in the procedure, showed little

concern as it went against him from the start. With that fatalism characteristic of men who continually risk their lives in the Arctic wilderness, he looked upon the trial as a mere formality. From the first he felt certain that he had reached the end.

Stub, silent, watchful, his mind aroused to its greatest activity, one eye always on the door, his faith in Bruns still unwavering, sat beside Henry's lawyer and, in reality, conducted the case for his friend.

Rayley's belief that Bruns would return in time with the necessary witness was little less than sublime. He had never known his partner to fail. Snellgrove's reputation, the rotting river ice, the fact that the fugitives might have to be brought back from Alaska, none of these things dismayed him. Bruns would do it.

But, when the soldiers had testified to finding Crossin beside the dead man with an empty chamber in his revolver, when others had told of the threats that Cadoo had made to kill the prisoner, and the door still remained closed, doubts came. He implored the lawyer to delay proceedings. He arose once and went to a window.

Crossin's attorney did his best, but the court ran smoothly in this, its first, murder trial. Before Stub realized it, the case had been summed up and the judge was giving the jury its instructions.

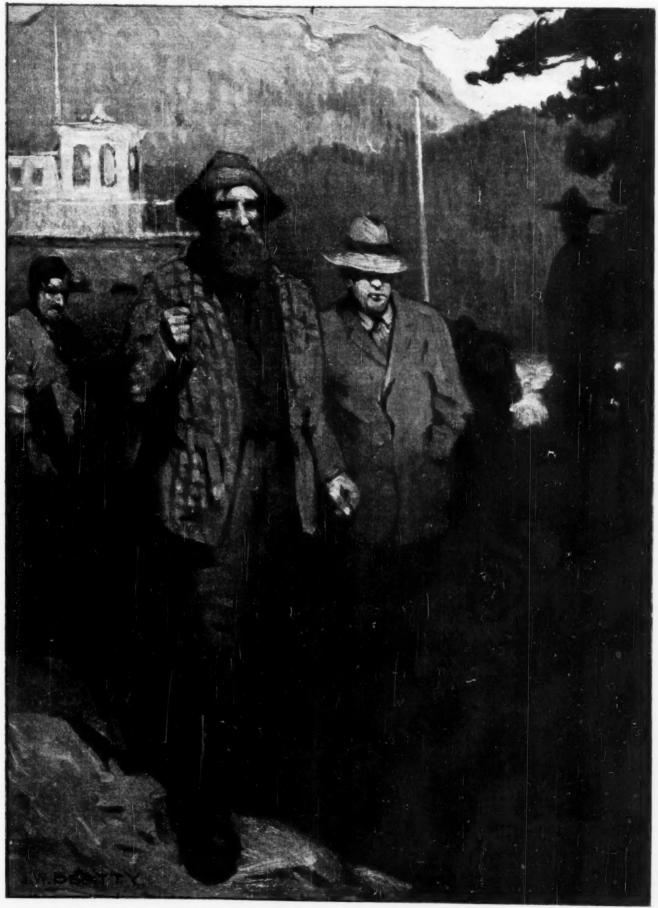
And then, a few minutes later, the verdict of guilty was returned. The little man sank into his chair until his face was barely visible above the attorney's table. Complete dejection and despair succeeded the expression of hope that had, until then, refused to be effaced. In this one big opportunity to repay what his partners had so generously given he had failed. They had borne the brunt in their struggles with rivers, ice, snow, steep trails and heavy burdens. They had never complained, nor had they ever asked anything of him in return. They were partners.

And now, when his chance had come he had not been big enough to rise to a situation in which brains alone counted and not the brute strength of Bob Bruns or the dash and vim of Hen Crossin.

Dazed, he sat through the succeeding formality, through Crossin's few calm words in response to the judge's query if he had anything to say, through the solemn sentence.

"-hanged by the neck until you are dead on-"

"If it please your honor," broke in the prosecutor, "a peculiar situation arises. I need not tell of the necessity of a death warrant signed by the Governor-General of Canada before execution becomes legal. It may be necessary, however, to consider the isolation of this court, the distance from Ottawa, the difficulty of travel. Before fixing the date, I would suggest that your honor consider the certainty of obtaining the death warrant."



The first man to step ashore was Bob Bruns. He carried his head a little stiffly, and the upturned collar of his shirt scarcely concealed a newly-healed wound. Beside him was a slinking, furtive figure who shivered as he saw the soldiers on the bank.

A conference of judge, prosecutor and court clerk followed. Several old-timers were called to the bench to join in the whispered deliberations. Trails, miles per day by foot and by boat, canoes and days by rail from Vancouver across the continent were discussed.

-hanged by the neck until you are dead on the first day of November," the

judge concluded.

Stub's head shot up above the table, his face ridiculous in its expression of mingled amazement and incredulity. Then he looked at Crossin, winked, and sank back into his despondency.

OLD, and the seeking of gold, shorten Gold, and the scenario in the grim hazards of their own lives. For a day the trial and conviction of Henry Crossin were the sensation of Fort The next day they were for-

Crossin went back to his cell to wait until November. Stub Rayley went about the business of the three partners. He prepared for the journey they had planned to their claims, staked far up a tributary of the Yukon the previous winter. They knew wealth awaited them there, awaited only their coming. When the ice went out Stub left, seated comfortably in a poling boat handled by two Norwegians

The summer passed. The first fall storms came, and it was two months since Crossin, lying alone in his cell, had received a visitor. The convicted man and his fate were forgotten completely, until one day Stub returned, still reclining in the boat which the big Norsemen poled

against the current.

First he went to the bank, the boatmen carrying a heavy burden between them. Then he hurried to the jail, where he recounted his summer's adventures, reported on the amount of gold taken from each claim and convulsed his partner with stories of his own inefficiency as a miner.

Smiling, evidently care free, Stub went about the town. Old-timers and newcomers alike shared in a growing dislike for the little man who could continue to smile as the date of his partner's execution rapidly approached. But either he did not see it or he did not care, and, when the warrant arrived, he smiled the more.

On October 28 he walked into the sheriff's office.

"Everything ready?" he asked.

Sheriff Vair turned threateningly. "Yes, and I suppose you'll be there with your damned smirk!" he exploded.

"No," drawled Stub. "No, because there won't be any hanging."

The little man remained calm through

the succeeding outburst.

"That's why I came to see you," he went on as though the sheriff had not spoken. "You can't hang a man on All Saints' Day. If you don't believe me, ask the judge.'

THE next day all Fort Selkirk again gathered in the court room. judge, imbedded in the training of a lifetime in Quebec, gravely and somewhat humbly confessed his mistake, forbade the hanging, despite the plea of the prosecutor and, after a second conference into which several old-timers were again called, addressed the prisoner and sentenced him to be hanged, this time on February 15.

Another set of papers was dispatched to Ottawa, and Fort Selkirk settled down to digest this new twist in the game which had come to supplant the old, quick methods of attaining justice. The story of Stub's visit to the sheriff had gone out, and there was a sudden change in the attitude of the men of the north toward this little fellow who, though he might not do a man's work on the trail, had risen to the occasion and defeated the law merely by doing a little thinking.

"I've often wondered what two good men like Hen and Bob ever saw in that runt," said Billy Wade in the Elite that night. "He ain't even a boy, as men stack up in this country. He couldn't pack fifty pounds down hill, and he never learned gee from haw. He don't know vet whether the Yukon flows up stream or down, and it's always been a wonder to me that he could light his pipe. He ain't like a plain chechako, for he's been here long enough to learn. It seems that he can't, or won't.

"But now I see something. I understand how Bob and Hen got to the head of Boyle's Creek before anyone else knew it was there, and several other smooth stunts they've pulled, and surprised every one by being so bright. The little fellow don't need to work. He just uses his head."

WINTER came quickly, and, when the first dog team arrived from down river, Stub spent much time watching the trail. After Christmas he watched more anxiously than before, and for the first time he began to doubt the omnipotent qualities of Bob Bruns.

Then, in mid-January, he received word, but word that only confirmed his fears. A man from down river called at Stub's cabin one night with a scant outline of Bob's activities until November 15 when

he had last seen him.

Sheets and Snellgrove had had a twodays' start on the big man and were far down the rapidly weakening river trail before the human thunderbolt was unleashed behind them. They had no fear of personal vengeance but there was a fear of the military authorities, and they kept on past Dawson until they reached the mouth of the Tatonduk, where the rotten ice drove them ashore.

Bob Bruns traveled eighteen hours a day while the trail lasted. He stopped at Dawson, but two days were necessary in that hysterical metropolis of the Arctic to ascertain with certainty that his quarry was not there.

The first day after leaving Dawson, he made the mouth of Forty Mile Creek, where he was forced ashore. prospector who had two canoes sold Bob one for \$300, and the big man was again traveling northward as soon as there was

room between the ice cakes for the canoe. The great river turned westward, and he dashed on. At Circle he learned nothing. He went on down stream, but each time he met a toil-driven, up-river craft inquiries convinced him that he had overreached in the chase. Back up stream turned the canoe, and its occupant sought fresh tracks.

The summer came and went, and Still Bob Bruns forced his canoe up rivers or dashed down swift currents. Once, when the chase took him up Birch Creek, he found the warm ashes of the pair's campfire, only to press on up stream, while Snellgrove and Sheets, still unconscious of the pursuit, toiled up a tributary.

Fall came with the scent gone and Bob's empty message to Stub. The little man, waiting in Fort Selkirk, did not know that winter found his friend again in Dawson, from where a bit of information had taken him far down the Yukon with a new dog team, and, as the cold became greater, on into the wilderness north of Mt. McKinley.

After this message Stub no longer smiled. He did not even visit Crossin because he could not bring good word.

F EBRUARY came and the little man brooded in his cabin. He left it only to make frequent inquiries as to the arrival of the second death warrant. It was not there on the tenth, though the mail was expected daily, and that night Stub disappeared from Selkirk.

"He couldn't stick around when his partner kicked off," explained Billy Wade sympathetically. "He couldn't beat the law again and I don't blame him for hiding out somewhere. It's tough, hoping for

a year and then lose out."

The interest of Fort Selkirk was revived. There had been a growing sentiment in Crossin's favor, and old-timers, men who knew him, argued that Hen could not be guilty as he never would have shot a man in the back. But the fatalism of the prisoner was shared by the growing number of his friends, and in the face this quiet mysterious, inexorable method of dealing justice, they could see no hope.

The morning of the day of the hanging arrived, but the death warrant had not come. The day passed and there was no dog team from the south. Night came and there had been no hanging. Vair and his deputies, their nerves raw, for they, too, had begun to believe in the condemned man and had only nausea for their task,

cursed and waited.

At noon on February 16 the mail team arrived. The dispatch bearer and his driver were two gesticulating, excited French-Canadians. But no one cared to form a connected story from their incoherent tales of "the long sleep," of dogs that would not waken, of a camp through which evil spirits flitted. All eyes were

on the sheriff as he got his mail.
"It's here!" Vair cried to a deputy as
he quickly shuffled the bundle passed out to him. "Get ready for it at three o'clock."

Everyone in the crowd knew what "it" meant and there was only silence as Vair made his way to his office. Irritably he threw open the door to see the smiling countenance of Stub Rayley.
"What do you want?" snapped the

sheriff.

"I dropped in to see what you are going to do now," replied Stub in his slow way. "Get it over with as quick as I can."

"Get what over with?"

"You know what I mean, damn you. This hanging is no more agreeable to me than to you.

"But you're not going to hang Hen?" Vair controlled himself with an effort.

Continued on Page 90.



# Explorer Robert Campbell

RINCE RUPERT, that dashing soldier of fortune By REV. R. G. MacBETH, M.A.

Author of "The Making of the Canadian West," etc.

high seas, whose name is commemorated in the Western terminus of our Grand Trunk Pacific did a remarkable day's business when, in 1670, he induced Charles II. to give him and his seventeen associates, control over most of the North American continent. In our time we make violent assaults on any corporation which seems to get an undue monopoly in any direction, but times have evidently improved in that respect since the date above mentioned. For in that year Prince Rupert and his handful of associates incorporated as "The Governor and Company of Adventurers of England Trading Into Hudson's Bay" had secured to them "the sole trade and commerce of all those seas, straits, bays, rivers, lakes, or creeks and sounds in whatsoever latitude they shall be that lie within the entrance of the straits commonly called Hudson's Straits, together with all the lands and territories upon the countries, coasts and confines of the seas, bays, etc., aforesaid that are not already actually possessed by or granted to any of our subjects of any other Christian prince or state. Besides the complete lordship and entire legislative, judicial and executive power within these somewhat indefinite limits the corporation also received the right to "the whole and entire trade and traffic to and from all havens, bays, creeks, rivers, lakes and seas into which they shall

and buccaneer on the

find entrance or passage by water or land out of the territories, limits and places aforesaid." As no "other Christian prince or state" had any claim on that part of the North American continent and as the implication was that the claims of heathen princes or states could be ignored—the Hudson's Bay Company being evidently left to discriminate in the matter of Christianity and heathenism—that corporation was really given full control.

"They were monarchs of all they surveyed,

Their rights there were none to dispute,

From the centre all round to the sea, They were lords of the fowl and the

and they were all that although, unlike Robinson Crusoe, they were to be not on a desert island but on a populous continent.

My object in calling attention to the extraordinarily monopolistic character of this charter is not only to lead any one to see how far we have traveled socially since that day but to claim that the only way in which such a company managed to rule a vast territory for nearly two cen-



Robert Campbell, from an old photograph.

turies without any discontent or revolt amongst the governed, was by their employment of peculiarly honorable, fair, and upright men as their chief officials in the country. The principle underlying this statement is one worthy of study by men who are striving for social betterment. There is little value in framing a beautiful social system on paper and expecting that it can be worked out by godless, conscienceless men. No system will work out for good without the highest types of men and the best evidence for that is our finding that even a bad system, like the excessively monopolistic one of the Hudson's Bay Company, can work out for general good through the high character of its agents. It is a calamitous mistake for makers of systems to ignore the stupendous fact of character.

Robert Campbell, the subject of this sketch, was one of the most remarkable of these Hudson's Bay officials, even as he was the last great explorer over the trackless domain in the company's far-flung possessions. When he was through his work there remained practically no large area of the continent undiscovered. Despite the extraordinary hardships to

which he had exposed himself amid the snows of the North he lived to the great age of nearly ninety passing away as

ninety, passing away as recently as 1894. I saw him at several stages of his life pilgrimage and had many opportunities of conversing with him-opportunities of which I avail myself with all the eagerness of a boy athirst for the joy of contact with a man who had proved his prowess and heroism in the famous fields of exploration. True, he could not be led into much talk about himself for he was modest almost to a fault, but the very chance of speaking with such a man was a tonic that sent one's blood moving, as Burns would say, "in fiercer thrills."

I saw him first when he had completed his explorations but when he was still in the service of the company. It was at my father's house on the Red River and the Campbell family, consisting of Robert Campbell; his wife and three children, two boys and a girl, were guests there on their way to or from a visit to the birthplace of the explorer at Glenlyon, Perthshire, Scotland. The two boys were of a particularly active and energetic type, strong as young colts and ready for anything. One of them, James, grew up to be a very powerful man, a famous athlete, and a most noted oarsman in the days when Winnipeg "fours" were showing half the world how to row. He died a few years ago. The other boy was Glenlyon, called after his father's birthplace. He has always been

known as "Glen" and his picturesque appearance, his giant stature, and his undoubted ability made him a well-known figure at Ottawa when he was a member of the House of Commons there. His maiden speech in that august assembly began in Cree, continued awhile in French and wound up in good, classical English. He is now Chief Inspector of Indian Agencies with an office at Winnipeg, and no one should know better how to conduct the work of that office since he has roamed the West practically all his days. The daughter and her mother were of gentler mould but, no doubt, had all the strength of character and the innate refinement which are characteristic of their race.

Robert Campbell himself, the head of the family, was a strikingly noticeable figure. The gathering years and his tremendous journeyings as an explorer in the wilds of the North had cast upon his raven locks and beard the snows that never melt. But he was still erect and powerful, though spare of figure and of great wiry strength, rather than bulk. One could imagine him as a chieftain on his native Highland heath and could

readily believe that in peace or war he would enlist the passionate loyalty and devotion of his clansmen. And yet as I came to know him in after years there was that gentleness and mysticism about him which is so often found mingled with the granitic elements in the nature of the Highlander. His religious life was pronounced, even if characteristically unostentatious. A relative of mine, who had been in the company's service too, was room-mate with him at a Winnipeg hotel during one of the famous re-unions of the old Hudson's Bay Company men, and he told me how Campbell read his Bible and prayed every night and morning, not with display, but simply and with the air of one who had made it a life habit. And when one thinks of the perils through which the noted explorer had passed, his life often hanging in the balance, one can well believe that the rugged Calvinistic creed in which he had been trained from childhood had been the tap-root of the moral stamina which had carried him triumphantly through everything.

And, speaking of these re-unions of Hudson's Bay officials, one recalls that these men, despite their lives of isolation at remote trading posts were men of remarkable intelligence, widely read and cultured. Their isolation was turned to good account in the occupation of reading. They got great papers like the "Thunderer" and magazines like Blackwood's, even though these came to hand in heaps with the yearly or half-yearly mail to the frozen North. But papers and magazines were read with such purpose that, when these isolated officials came to the outside world, they were amongst the best in-

formed men of their day. And it is on record that many of these men gathered and published scientific information which made them the admiration of university men the world over.

Amongst these men Robert Campbell held a foremost but wholly unassuming place. Some years ago at the request of many he wrote a brief and extremely modest autobiography of himself up to the end of his exploring career in 1851. Copies of this are on file with the capable archivists in Ottawa and Victoria. The general character of the story is self-effacing and one has to supplement it from one's own knowledge of this remarkable man. Albeit the document is highly interesting as well as very valuable. It is eloquent in description and occasionally breaks out into quaint and pawky humor in which a Highlander sometimes indulges himself.

Campbell was born on a sheep farm in Perthshire, Scotland, in 1808, and had the good fortune to pass the first twenty years of his life in the pastoral occupation which has given to the world so many men trained in plain living and high thinking. But one day when a cousin, Chief Factor McMillan, came to visit at the Perthshire homestead, the tales he told of the wide, free, adventurous life of the Hudson Bay

country fired the imagination of the shepherd lad and he enlisted for service in the Great Company. With the brave benediction of his father and mother, Robert Campbell set out for the wild Northland and was given an appointment to manage an experimental farm which the Hudson's Bay Company founded in the western end of the present city of Winnipeg. Some have supposed that experimental farms were quite recent institutions in Canada but four score years ago this remarkable company had one in operation on the banks of the Assiniboine River.

On Campbell's arrival in the country he was delighted to find in the Selkirk Colony of Highland pioneers on the Red River what he calls an "oasis" in the howling social desert of the North-West. He writes with pride about the intelligence and culture which prevailed in this farthest frontier community and, after speaking of the fact that they had only two mails a year from the outside world, he states that there was "No lawyer and only one doctor" in the settlement; then he adds quaintly, "Nor is there much use for either." In truth the splendid openair life on the edge of the wide prairie with buffalo hunting and fur-trapping for pastimes left little place for the service of the doctor while the fact that, in all their business transactions, a man's word was all that was needed made the man of documents and courts unnecessary in this

Arcadian community.

Part of Campbell's effort on the new farm was directed to the importation of sheep. In this connection he journeyed on foot as far as Kentucky in 1832 and, despite spear-grass and heat, brought a

thousand sheep back. But the farm was not, on the whole, a very profitable experiment. This was not Campbell's fault because in reality it was the tremendous zeal and conscientious effort he put into his work there that attracted the attention of Governor Simpson and marked him out for the more adventurous and perilous career of a pathfinder in the far North. During his farm work period for the company he says he got into the good habit of doing with only four hours sleep out of the twenty-four. Doubtless this habit proved useful in the after days when in the midst of treacherous Indian camps he had to be pretty steadily on guard.

And so in 1834 he was appointed to the McKenzie River district and, as he was leaving, Governor Simpson said, "Now, Campbell, don't get married as we need you for active service." One need not subscribe to the implication in the admonition of the "Jolly Governor" as Simpson was called. But, in any event, Campbell gave himself no time, for nearly a score of years more, to go back to bonnie Scotland for his bride. Had she come out earlier she would have had to live alone while the eager explorer was away across mountain and plain in the service of the company. But it may be worth while here to note that, once his exploring work was through and he was assigned to a settled post, Campbell lost no time in making a great snow-shoe journey to civilization on the way home to be married.

Meanwhile, from 1834, with base of operations in the McKenzie and Peace River areas, he devoted himself to the work of exploring and pushing the company's trade. Governor Simpson, who was

a keen judge of men, saw what was in the once shepherd lad of Glenlyon and had said to him: "Push the trade across the mountains." A year or so later when the Governor wrote congratulating Campbell on what he had already done he added at the very end of his letter the suggestive words, "Robert Campbell is not the man I take him to be unless he plants the Hudson's Bay standard on the shores of the Pacific." The sequel showed that Governor Simpson was not mistaken in his man.

In fact when one reads over Campbell's brief and modest autobiography and reads between the lines as personal knowledge of the man supplements. one is reminded irresistibly of his great fellow-countryman, David Livingstone. There is the same ruggedness and humility of character, the same implicit faith in God, the same grim determination and the same wonderful power to command the love and devotion of their men amidst the direst circumstances. Their spheres were in many respects totally different but each felt that he was opening up a new part of the world for the advent of a higher civilization. parallel struck me first when I read that Campbell at one stage of his explorations, when he was Continued on Page 86.



Mrs. Robert Campbell.



# Who, How and Why: By H. F. GADSBY Illustrated by H. W. COOPER

# A S Mr. Shakespeare aptly puts it: Excursions and Alarums! Dull sickening thuds in the distance. Also faint moans. Enter Frank Broadstreet Carvell, L.L.B., K.C., M.P. for Carleton, N.B., chief gunman to his Majesty's Loyal Opposition in the Canadian House of Commons. The noises off stage indicate that Frank has been starting something.

Just here the reader pauses to give this famous fighting man the once-over. His face is not as well known west of Ottawa as it is east of the capital city but now that he has embarked on a career of sanguinary activity for the good of the people it will no doubt be better advertised. Since he may be heard from ever and anon as being seen in the neighborhood of a dead politician it may be just as well to give

his Bertillon measurements. To begin with he scorns disguises. Anything he says or does is right out in the open. Likewise, he has never worn any kind of whiskers because he does not believe in ambushing his features. He carries this habit so far that he leaves his hair a little thin on top so that the casual observer may see what is going on in his mind if he cares to take the trouble. His keen, blue eyes are not shielded by pince nez, spectacles or goggles, because he loves the light and aims to let it through or into all offenders against the commonwealth. His collar is not high enough to hide the long, lean line of his jaw and the forward thrust of his square-cut resolute chin. In short he practises no concealment whatever. He is as bold and above-board as a torpedo boat destroyer, like which he is always cleared for action and ready on the

Of course one has to be bred that way. No union of sucking doves produces that beligerent strain. Frank Carvell is U. E. Loyalist by his father, which is a guarantee of vigorous protest; Ulster Irish by his mother, which bespeaks a natural zest for battle; and good sturdy Canadian on his own account which explains the rest. With these hot currents in his veins he could hardly miss being a crusader. He was brought up on Adam Smith and the Wesley Brothers' hymns which have reacted mutually—that is to say, he is a free trader all through, being broad-gauge in his doctrine and evangelical in his polities

Frank Carvell was born too late to be a Father of Confederation but he has been a sort of a big brother to it ever since he reached years of discretion, seeing that it behaves right and occasionally spraying it for a disease called graft. Canada lost a great propagandist when Frank Carvell

# The Original Why Why of the Commons



He was behind the walls at Torres Vedras, and his business was to defend.

became a lawyer and settled down to a thriving practice in a prosperous New Brunswick town. But life was not as complicated thirty-five years ago as it is today—the burning wrongs developed later—and the main thing was to earn a living. So Frank Carvell became a lawyer and, since he was in the business, he made it his concern to be such a good lawyer that everybody wanted him on their side. At least I have never met anybody from New Brunswick who expressed a desire to have Frank Carvell against him if he were accused of murder.

There are lawyears and lawyers. It was the former class Jack Cade had in mind when he proposed as his first measure of reform to hang a few, when he got

up to London. Oliver Cromwell was of the same opinion and gave it out that the state would never be better until certain legal luminaries that he knew swung from Tyburn Tree. Later on the Terrorists of the French Revolution felt that the best cry they could raise was "à bas les avo-cats" which meant stringing them up to the nearest lamp-post. But all these reformers were dealing, as I said before, with the first class of lawyers, those who were on the side of might against right, of privilege against the people. Frank Carvell was never that kind of lawyer. He belonged to the other class which cherishes democratic ideas and applies its special knowledge to the betterment of the people. In the course of thirty years' practice he gained a tremendous reputation as an

upright man and a good lawyer—the word good having moral and ethical as well as professional annotations in his case.

Some sixteen years ago Lawyer Carvell felt those stirrings of public life within him which could not be denied. He surmised that there were things to set right and started out to do it. He has been on the job ever since. He nosed, so to speak, into the New Brunswick Legislature in 1899 but, smelling the larger field afar off, he resigned and went to Ottawa, as member for Carleton in 1900. He fell upon eleven piping years of peace under the Laurier Administration. He did not attack because he was not on the right side to do the attacking. He was behind the walls at Torres Vedras and his business was to defend. Defending is necessary work but dull-it engenders fortitude but discourages brilliant There wasn't much to put Frank Carvell on his mettle but he was acquiring merit with his leaders just the same. He was a born defender and they gave him considerable to do. Almost any Government that is fairly busy will take a lot of defending. Frank Carvell's work may have been monotonous but he had a few slack

It soon became evident that the member for Carleton had an inquiring mind. Not that many avenues of inquiry were open to the Government supporter. Some, indeed, were dug up and sported "No Thoroughfare" placards; but the gift of research was there and it was plain enough that all Frank Carvell needed was a chance. Sir Wilfred Laurier made a mental note of it, kept the idea in that shrewd old head of his, and acted on it later on. As a major of artillery, with special technical knowledge on the subject, Frank Carvell directed a little helpful criticism toward the Militia Depart-



Four, count 'em, four-no other hunter in Parliament has a record like it.

ment but not enough to hurt Sir Frederick Borden. His guns were not exactly spiked but the reports sounded more like a salvo than a bombardment. This was the fault of circumstances. A good soldier does not fire on his own side. Frank Carvell did his full duty when he went just far enough to show that the inquiring mind was there, waiting to spring, so to speak.

When I say "inquiring mind" I understate the case. Frank Carvell is a Radical. He was a Radical in his cradle. He is the original little Why Why. When his rattle broke he asked Why; when his first tooth

caused him pain he asked Why in strident tones. He has been asking Why more or less ever since, not with the aimless curiosity of Dickens' young man who wanted to know from the Circumlocution Office, but with the definite purpose of not only finding out Why but how to make it better. Frank Carvell does not shoot at wrong in a general way; he marks his man and picks him off neatly.

It was immediately after September, 1911, that his period of usefulness as a gunman began. Every time Frank Carvell went gunning he got his man. Four years have now passed and there are four new notches on his weapon. Four, count 'em, four—no other hunter in Parliament has a record like it. What's more Frank Carvell is a still hunter—he doesn't use

As this is not a political article it would not do to go into the causus belli in each clash—nor yet to mention names. Suffice it to say that two of the notches were added during the 1915 sessions of the Public Accounts Committee. Some people speak of the Public Accounts Committee as if it consisted of several persons, and, indeed, it is one of the largest committees of the House, but so far as the session of

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1915 is concerned Frank Carvell was the Liberal half of it and then some. Others may have chipped in from time to time but Frank Carvell did the chivying and kept the muzzle trained. It was good gun-play all through, no gallery practice or shooting at bottles, but straight business every

minute. Carvell stuck to his work and never even looked at the reporters to see how they were taking it.

This brings us to the end of Frank Carvell's deeds of derring-do up to date, but we may expect to hear from him again. His talent for plain and fancy shooting will never rust as long as we have party Government. Meanwhile, he has gentler avocations. He is not always engaged in bombarding the wicked out of their green bay trees. Besides being a lawyer he has an electric light and power works to run. It furnishes the juice for the whole community and has kept them pretty busy for some years paying for buildings, equipment and maintenance. In a way it is a labor of love, for light and power are his hobbies -more light on the dark places of politics, more power for the people. Frank Carvell is very fond of light -he lets it into people even at the risk of drilling holes in their reputations.

The member for Carleton is also a director of the New Brunswick Telephone Company which goes to show that he has organized his powers of hearing as well as those of seeing for the public good. But his softest side is farming. Like that stern old Roman warrior Cincinnatus he delights to turn from the field of blood to the mild and fruitful glebe, from the triumphs of the forum to the cultivation of his fruit trees. He makes farming pay. When the hay or the potatoes fail he still has two fine crops—contentment and long thoughts.

### The Call of Mary Lake

When the sun rides high in the vaulted sky
And the summer breezes wake,
To Nature's child, from Muskoka wild,
Comes the call of Mary Lake.
And it's ho for the maple paddle!
And ho for the old canoe!
And a rippling ride o'er a sun-tipped tide,
With the air a pulsing blue.

From the pine-rimmed shore, from the rapids' roar, Comes a voice that we can't mistake; 'Tis Muskoka wild calling Nature's child To the charms of Mary Lake.

Then it's ho for the maple paddle!

And ho for the old canoe!

And we sail away through the sun-flecked spray To the Island of Just We Two.

-Beatrice Sifton Nasmyth.

#### By HUGH S. EAYRS The Last Ally: Illustrated by E. J. DINSMORE

SYNOPSIS.—Donald Fenton, a young Canadian, was traveling in Europe when the war broke out. He was enjoying the luxury of unlimited means, and the transition from the position of newspaper reporter and real estate salesman in Montreal to a millionaire towing the Continent, was still novel. When the war broke out he was in Austria and had to cross the line into Russia. Returning to enlist, he finds it necessary to travel through the Balkans and in Ironia calls on his old friend, Percival Varden, who has married the Baroness Draschol and settled down in Serajoz, the capital. Ironia is bound to be drawn into the war and rival factions are fighting to direct her course. Fenton goes to a royal ball and meets Princess Olga, daughter of Prince Peter, leader of the faction fighting to enlist Ironia with the allies. He happens to overhear the assassination of Prince Peter planned at a meeting of the Society of Crossed Swords, which has been formed in the interests of an Austro-Germanic alliance. His presence is discovered and he narrowly escapes being shot. He meets Miridoff, the leader of the society, in the ballroom and finds that he is a marked man. Fenton cannot find either Peter or Varden and so tells his story to Princess Olga. On the way home from the ball Fenton is fired at, but escapes unhurt. He accompanies Varden to a secret meeting of representatives of the Allies where plans are discussed for Ironia's entry into the war. The Russian enroy serves notice that Ironia must act quickly if she desires to win back her two provinces now held by Austria. After the meeting, Fenton is introduced to Anna Petrowa, a famous dancer, who is in Serajoz as a Russian secret service agent. An attempt is made to assassinate Peter as he leaves the meeting. Fenton and Varden succeed in saving Peter's life. Next morning, Miridoff, who has been chosen by King Alexander as the future husband of Princess Olga, calls upon her to communicate the King's wishes and meets with a rebuff. That day General Pau, the French hero, passes through abduction has been successfully carried out. Here he mee Phil Crane, a young English engineer, who has been working in the Ironian oil fields, and has just escaped from detention.



ENTON, who had regretted every moment spent in the satisfying of even so clamorous a possession as his appetite, now made a motion to get up. He had betrayed signs of impatience for some time.

"Father, you know the urgency of our mission, and will not think ill of us if we lose no time in setting out," he de-clared. "The life of the Princess Olga may depend upon our promptness."

The old priest restrained him with upraised hand, speaking in a low and cautious tone.

"A word in your ear, my son," he said. "It would be well to depart when no one sees. It shall be given out that you stay as my guests to-night. After night falls you leave with a guide that I find."

"You mean that we might be spied upon?" asked Fenton.

The priest hesitated.

"Differences of opinion are found even in such small hamlets as ours," he said, with a trace of sadness. "Those are here who might carry word ahead of your coming. They would sell you to those who have taken our Princess."

"You know best, I guess," said Fenton, endeavoring to accept the priest's dictum with as little impatience as possible. "But how can I stay here when I know she is in danger-that every minute



Watching from the window of a room on the ground floor which had been appropriated to her as a bedroom, Olga felt a sudden stirring of resentment when she recognized in the fair stranger the woman to whom Fenton had been so attentive.

counts? It's like watching a person drown while you wait for someone to bring you a pair of rubber boots!"

"It's common sense, though, Fenton," broke in Crane. "I've lived in the country long enough to know that you've got to keep your business strictly to yourself. In a matter of this kind you can't be too cautious. If you want to be of real assistance in this matter you'll have to keep cool for a few hours.'

Fenton, who had risen during the discussion, sat down again, prepared to accept the ordeal of several hours' inactivity with as good grace as he could assume. The kindly priest laid a wrinkled hand on his arm with a gesture that was almost a benediction.

"Listen, my son," he said. "By this time, she whose safety we all wish above everything else in the world, far away has been carried. A man of God who has brought the message to one people for fifty years, has baptized the children, married the young people and shriven the dying, knows much that goes on of which he cannot speak. A guide I know who will take you where the Princess Olga is. And also he will lead you to where is found Take Larescu."

"Larescu!" cried Crane in so loud a tone that the priest glanced anxiously around and laid a warning finger on his "You mean the famous leader of the brigands, the king of the hills, the man who defies any authority but his own, but who volunteered under another name and fought in the Ironian army as a private all through the Turkish war?"

The priest answered him in guarded tones but with an inflection of pride that no need for caution could subdue.

"Take Larescu is great patriot, great warrior, great friend of my people, the poor peasants," he said. "Larescu has fought the rich nobles, he has robbed and, God forgive him, has killed. He has sinned much, but his good deeds are as the trees in the great forest. When the war for the lost land comes, Larescu will be at the front of battle. He is wise, he knows much of the great world. He can save our Princess, young sir. To Larescu must you go first."

"The people who live in the mountains are almost a different race from the rest of the people of Ironia," explained Crane "They're a wild lot, with a to Fenton. gypsy strain in them. The Government of Ironia has completely failed to impose any legal restraints on them. They have their own customs, their own laws and a chief who rules them as absolutely as any king that ever lived. But if war breaks out, they'll go and fight for Ironia to a man. And, Lord, how they can fight! Their chief, Take Larescu, is a giant who can take on any three ordinary men. I've heard stories of the wonderful things he has done that you wouldn't believe-but which I know are more than half true. Take Larescu is a combination of Theseus and Robin Hood with a dash of D'Artagnan thrown in. If our host can enlist his sympathies, the rescue of the lost princess will develop into a pleasant little picnic party."

The three men sat around the table and conversed in low tones as the shades of evening settled down, the priest chaining the interest of his guests with tales of Ironia's turbulent history, stories of Turkish oppression, of wars fought for liberty, of feudal strife and internecine struggle. In broken phrases that somehow embraced a graphic power of vivid portrayal, he told the life story of a down-trodden people only now groping on the threshold of nationhood.

"Drive the nobility and the oil-crats out of Ironia and you'd have the makings of a great nation," said Crane, taking up the thread of narrative where the priest left it. He proceeded to give a more detailed account of his own experiences, telling of the vast extent of the oil fields and the huge profits that the owners were making. An Ironian workman received a few pence a day, doing the work for which a man elsewhere would receive as many dollars. The discipline was severe, almost as rigid, in fact, as in a penal institution. The law stopped practically at the boundary of the oil country; within that limit the word of the owners was law.

The priest listened silently, bowing his head in sad assent to many of the statements that the young Englishman made. Fenton also was silent, hearing but little of the conversation. He sat back in his chair and gloomily conjured pictures of Olga in the power of the arch-villain Miridoff; and Wellington, on the crucial field of Waterloo, did not long for night with greater intensity than did Fenton for the descent of the sheltering darkness which would enable him to start out on his quest.

#### CHAPTER XIII.

#### In the Hill Country

IT was after ten when they quietly emerged from the house of the old priest. They sky was overcast so that not a star showed; a more perfect night for a surreptitious exit could not have been chosen. A peasant silently emerged from the shadows at the side of the road, and placed himself before them, hat in hand.

"Sashu will take you to Larescu," said the priest. "You can depend upon him, He is a peasant from the estate of His Highness, the Prince Peter, and would give his life willingly for any member of the family."

"Father, you have indeed been a friend in need to us. I wish I could repay a small share of what we owe you," said Fenton, his hand straying toward his pocket. Crane noticed the movement and nudged him under cover of the darkness. "Not that," he whispered. "They are very proud, these Ironians, and very glad at all times to offer hospitality. You would mortally insult him."

"Perhaps," said Fenton, hastily, "there is something we could procure for the church—a new altar cloth, say. I would like to do something for your people in that way, Father. Suppose I leave the matter in your hands. If this is not sufficient, we could fix it up on our return twin."

The old priest accepted the money that Fenton proferred with an eagerness that showed how deeply his interest had been touched. He thanked them earnestly, explaining that there were many things he could purchase with the donation. They struck off into the darkness with his parting benediction following them.

For a long time they tramped on in silence. Sashu led the way along rough country side roads, Fenton and Crane following side by side. After covering about half a mile in this way, the villager turned abruptly to the left and led them up a winding path directly into the heavily-wooded approach to the hills. The walking now became very difficult as the grade was a steep one and the ground rough. The two men began a conversation, but lack of breath rendered it spasmodic. Finally they reached a wider and fairly even road on which the ascent was more gradual.

"By the beetling eyebrows of Beelzebub!" gasped Crane. "Another hundred yards and I'd have been knocked out. The food you get in an Ironian jail doesn't fit you for mountain climbing."

"I wouldn't mind the grade so much if the moon would only show itself," said Fenton, whose determination to get on to their journey's end had carried him through the climb with less difficulty. "If we could only see where we were going we could make something like decent time over these hills. Our guide doesn't seem to be having any difficulty."

"An Ironian peasant can see in the dark," asserted Crane. "They're a queer lot—a good deal like animals in some ways. An Ironian peasant doesn't look much farther into the future than the next square meal. When his stomach's full, he has just one ambition, to curl up in the sun and go to sleep. Beat him and he'll do your bidding like a sullen donkey; and the first time you come within kicking distance, he puts his heels into you, figuratively speaking. Treat him well and he'll die for you like a faithful dog."

"Perhaps you could get something out of this picturesque fellow ahead of us," suggested Fenton. "Find out from him where we're going and when we can expect to get there."

"I don't think it would be much use," said Crane, doubtfully. "The Sphinx is a positive chatterbox compared with one of these peasants. You have to treat them like electors: prime them with a gallon or two of extra strong liquor before you can pump anything out of them. I don't suppose you have anything of the kind handy?"

"No," replied Fenton. "That was another thing I forgot to equip myself with before starting out. It has just occurred to me too that I neglected to bring along a revolver. We're not very well equipped for an expedition of this kind."

Crane stopped short, and indulged in a

hearty, unrestrained laugh.

"Fenton," he said, as soon as he had recovered, "I'll bet you've kept your guardian angel working night shifts ever since you were born. By the twisted horn of the off ox of Ind! You start up into a mountainous country teeming with blood-thirsty brigands in pursuit of a band of villains who've carried off a princess-and with no other weapons on you than those with which nature was good enough to provide you! You can't even talk the language. You accept the services of the first guide offered and, really, if his villainous visage is any indication of what we can expect from him, he'll cut our throats the first chance he gets. Methinks, friend Fenton, I can hear the stealthy tread of the Fool-killer in our wake; and I'll bet he's spitting on his hands!"

"You don't need to come any further," said Fenton, with some heat. "I warned you in the first place that it might be a

dangerous mission."

"Don't misunderstand me," pleaded Crane. "This is only my way of expressing admiration. It's not so much that I admire courage as that I bow humbly before originality whenever I meet it. And, lord, man, you are certainly original! I'll wager no one has ever tackled a job quite like this one before. But don't think I'm not as keen for the trip as ever. The longer the odds the better I like it. Only—I think it would be advisable under all the circumstances if I got as much information as I could out of the pleasant-looking cut-throat ahead."

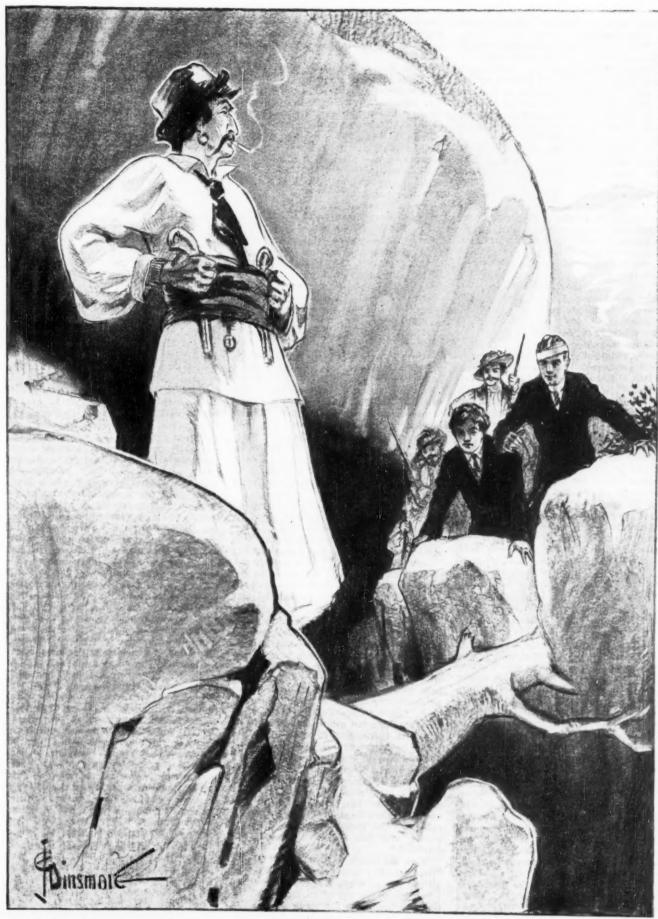
He called to their guide in Ironian and Sashu's deep voice answered from the darkness ahead of them. Crane quickened his pace until he had drawn even with the villager and for a space of ten minutes they talked. Sashu answered Crane's questions readily. The latter then dropped back again.

"Friend Sashu is the exception that proves the rule of Ironian taciturnity," he stated. "He avers that we'll reach the place we're making for some time between now and morning."

"And where is he taking us to?" asked

Fenton.

"Well, he seemed rather vague on that point," acknowledged Crane, "or perhaps cross-examination isn't my long suit. I didn't get a great deal of information out of him on that point. In fact, not any. These natives are as close as



Moving with the apparent leisure of extreme ponderosity, Larescu took up his position, a formidable Horatius capable of holding the bridge against any odds. His new position was not taken for purposes of defence, however. In a booming voice he called out a gruff but hearty greeting.

oysters about the haunts and movements of Take Larescu."

"Then we are really being taken to the headquarters of this brigand chief?"

"We're headed that way," said Crane, "and likely to make the grade provided we don't slip off a precipice on the way or meet any wandering parties of brigands. These hill billies have the pleasant habit of potting at you first and enquiring about you afterward."

"To think of the Princess being in the power of these people!" groaned Fenton. "Say, Crane, can't we travel faster than this? Tell the guide we can't dawdle along this way any longer."

"It wouldn't be safe to go any faster, not in this darkness," protested the engineer. "Do you realize that the path we are on now is just five feet wide and that one false step would take us back to where we started from in about three seconds?"

Nevertheless, they responded to Fenton's impatience by quickening their pace and, in silence again, climbed higher and farther into the rough hill coun-Sometimes they had a clear, even path but more often Sashu led them along narrow ledges where the footing even in the daylight would have been precarious, so that they had to grasp hands and feel cautiously ahead before making a step. Sometimes they left the trail entirely and clambered up over the rocks, guided by husky directions from Sashu and sometimes assisted bodily by the guide. It was gruelling work and it was not long before the two westerners were muscle weary and puffing for breath. Fenton urged himself along after the last ounce of physical initiative had left him by conjuring up lurid pictures of the Princess Olga in the power of the unscrupulous Miridoff. Even when so weak that he had to clutch several times at a rock before gaining a hold, Fenton was able to spur himself on to increased speed by the thought of the possible dire consequences of delay.

They had finished a particularly difficult climb over a rocky promontory that projected across the path. Sashu cautiously swung himself down until his feet touched the narrow ledge of the path on the other side. Fenton followed suit, releasing one hand from its tenacious grasp of the rock while he slowly let his weight Unable to bear the full strain, the other hand lost its grip and, with a mad thrill of fear, Fenton felt himself slipping. He lunged frantically for a saving hold with the free hand but the effort came too late. He continued to slip and came down so rapidly that, when one foot struck on the edge of the narrow ledge, his weight and the momentum of his fall, threw him outward.

At such moments the mind acts with lightning rapidity and kaleidoscopic powers of variation. In the brief second that precedes a plunge to death, the events of a life-time can flash in fleeting procession through the human consciousness. Fenton thought of Olga, of the helpless position in which his death would leave her, of Varden, of Ironia and the war—and again of Olga. And then his downward, headlong fall was

arrested, brought to a stop with jarring, crushing violence! He felt a sharp pain in his head; and then darkness closed in.

When Fenton regained consciousness, he found himself stretched full length on a ledge of rough rock. His left arm was hanging partly over the edge. In the first moment of consciousness he became aware of numbness and a racking pain in his head. The darkness of night had given way to the dull grey of early dawn, by which token Fenton knew that some hours had classed since his fall.

He groaned and shifted himself slightly with a painful effort. For a few moments he remained perfectly still, collecting his strength, and then raised his voice in a call for help. Immediately he heard an exclamation from above and a dark object showed against the grey of the wall of rock that shut off all view of the sky on one side of him. Fenton. focused his wandering glance on this object and it finally resolved itself into a head peering over the edge of the path higher up.

"Fenton! Where are you?" the voice of Crane floated down to him.

"Here," he called back. The hammering pain in his head made his voice seem small and far away.

It was several moments before the voice of Crane again reached his ears. "I see you now," he cried. "Thank heaven, you're safe, old man! I've been sitting up here for half a century waiting for dawn so that I could get down below and hunt for your body. Sashu left hours ago for help and ought to be back any time now. Are you badly hurt?"

"I think my head's broken," replied Fenton, faintly, "and I suspect other injuries."

His voice apparently did not carry to the ledge above, for Crane went right on: "Cheer up, Fenton! I'll have you up out of there in no time. I believe I can see a path leading down there some distance on! Just keep easy in your mind and I'll soon be with you."

There was a long silence after that. Several times Fenton called but got no answer. The pain in his head became well-nigh unbearable. When he had just about convinced himself that the presence of Crane on the ledge above had been purely a figment of his fevered imagination, he heard a voice from behind. "Here I come Fenton. I don't believe anything but a bird ever negotiated this path before but, by the tail of the sacred cow, such trifles as narrow ledges and the laws of gravitation can't thwart Philip Alosius Crane! And what's more, we're both going back the way I came."

There was a short interval during which Fenton heard labored breathing and the sharp impact of Crane's heavy shoes on the rocks, gradually drawing nearer; and then he felt a hand on his forehead.

"How are you, anyway?" asked Crane. "Don't think I was ever so thankful in all my life as when I heard your voice. I had given you up, of course. I sat up there on the rocks for three solid hours waiting for daylight so I could do some-

thing and I hope I never put in such a night again."

"Can you sit up?" he went on, quite cheerfully now. Fenton exerted himself and, with the help of a powerful tug from his companion, struggled into a sitting position. He felt very weak and dizzy still but his ability to move convinced him that he had sustained no serious injuries.

"Fine!" exclaimed Crane, with enthusiasm. "You're a long way from dead yet. Here, I want your belt."

He took the belts from around his own and Fenton's waist and dexterously knotted them together. Then, slipping one arm under Fenton's shoulders, he helped him to his feet. Turning quickly he drew the latter's sound arm around his neck and strapped him to his back with the belts.

"I'm too heavy a load for you," protested Fenton. "Strapped up this way I'll be able to walk alright. Let's try it anyway."

Crane straightened up until Fenton's feet touched the rock again. The latter's strength was slowly coming back, and after a moment's hesitation, he stepped out. Thus slowly and uncertainly with locked step, Fenton buoyed up by the pressure of the strap, they negotiated the steep pathway. Every few yards they paused to allow Fenton to regain his strength, and, as the grade increased, these stops became more frequent and of longer duration. The path was a narrow and winding one that would have tried the skill and daring of an Alpine guide. It was plentifully interspersed with sharp corners, around which they edged with the utmost care, and rocks over which they laboriously climbed. A terrific strain was imposed on Phil Crane for there were times when he had to practically carry his companion and the brunt of working their way over the obstructions and around sharp corners fell entirely on his shoulders. All that Fenton was capable of was an automatic power of motion. Several times they were on the verge of collapse into the vawning chasm but on each occasion the coolness and intrepidity of Crane saved them. And in time they won their way to the top, practically impossible though the feat had seemed at the outset.

"Didn't think we could do it!" gasped Crane as he dragged his companion over the edge of the road to safety. He fumbled with almost nerveless fingers at the belts, and, when they had been freed, two inert masses of flesh and bone sank limply on the rough surface of the rock. The path at this point was fairly wide so that they could recline upon it with perfect safety. For a long time they lay there without a move, too exhausted even to speak. Finally, Fenton turned a little toward his companion and stretched out his arm.

"You're a wonder, Phil," he said.

Crane sat up and gripped Fenton's hand. "Don't mention it, Don," he said. Then he gave vent to a glad halloa. "Here comes Sashu and a whole male chorus of brigands. I was beginning to think it was time he got back."

Continued on Page 92.

# Efficiency the Keynote of Business

"R EBUILD your plant!"
In three words the Efficiency Man, who

By WILLIAM BYRON

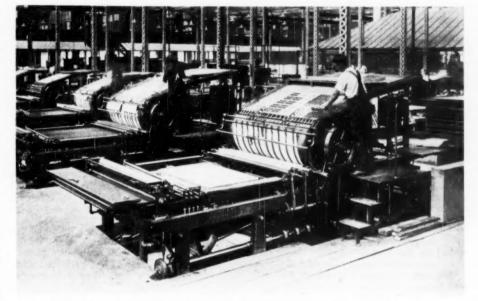
had been called in by a large Canadian manufacturing concern to report on certain internal ills of their plant, jarred the directors out of their smug complacency. Re-build their plant, that busy, smoke - belching hive of industry, the capacity of which had been doubled in the last four years and on which immense sums had been spent reinforcing and general remodeling? Why, they had just completed addition to the

foundry that had cost sixty-five thousand dollars alone. Rebuild the whole plant? The directors, after the first shock, smiled broadly at one another; then smiled with sour acceptance of the fact that they had been "done." They had paid this expert one hundred dollars a day for three months—and this was the result!

The expert was not at all nonplussed, however, by the broad skepticism that showed plainly on the faces of the directors. He plunged right ahead with his explanation, speaking in rapid, staccato tones, that somehow had a convincing power.

"You are surprised," he said. "I thought you would be. Your plant at present is capable of the production required. The buildings are in good shape; most of them are probably good for twenty years to come. And yet you will save money if you scrap the whole plant and rebuild entirely!"

Without waiting for comments, the Efficiency Man went on to explain his rather paradoxical proposition. plant was a patch-work affair, the result of continual expansion. Wing after wing had been added to the works, each addition being dictated by the need for more room in certain departments and built without any regard for the general plan. The result was a jumble of small shops, innumerable floor levels and as far as the handling and storing of stock was concernedchaos! Instead of having matters so arranged that the raw material came in at one end of the plant and went out the other in the shape of the finished product, the arrangements for handling were roundabout and slow. Time was lost and much unnecessary labor was expended in the handling. In all corners of the hig-



Efficiency is the science of teaching men to get better results from the work they do,

gledy-piggledy plant were stores of stock that had been overlooked or neglected. A proper stock-taking was almost impossible, or at any rate so formidable a proposition that it had never been attempted.

The Efficiency Man painted so convincing a picture of the shortcomings and inefficiencies of the plant from the standpoint of increased and economical production that the directors finally reached a rather extraordinary decision. They decided to build a new plant.

Plans were drawn up with a regard for quick transfer of stock from department to department and the other phases of internal efficiency. It took two years to build the new plant and so large an expenditure that a frantic wail arose from the shareholders. But it paid. The directors realized how fully it was going to pay them before the work was completed. It increased their production to a very material extent and in some of the most important items cut their operating expenses exactly in half!

This instance, which occurred in one of the best known manufacturing towns in Canada, demonstrates the real meaning of the word Efficiency.

"The first efficiency man was Simon Legree," someone had said. And that opinion unfortunately is shared by many. It is a mistaken impression created by the exaggeration that naturally accompanies every new idea or large movement. Efficiency is not the driving force that makes men work harder; it is the science of teaching men to get better results from the work they do. It is not a cult of feverish activity; it is the commonsense theory that system and concentration are needed to direct effort toward maximum results.

Most business men in Canada have realized the importance of a greater degree of

efficiency in their organization. Some have openly brought in experts to go over their establishments with the idea of detecting faults and suggesting the necessary remedies. Others have unconsciously yielded to the tendency, and by a closer study of detail and the application of established principles have brought the business in which they have been engaged to standhigher ards. This does not apply solely to manufacturing plants. The thirst for effici-

ency is shown in all branches of business and the merchant grapples as earnestly with the problems of his store as the manufacturer does with his plant.

S OMETIMES the increase of efficiency results in reshaping policies or in complete reorganizations as in the case cited above. More frequently, however, it is manifest only in the improve-ment of details and the elimination of small faults. For instance: In the bindery department of a printing plant, it was found that the work was not proceeding as smoothly as it might. On investigation it was found that the work was very badly handled. Where it was necessary to collect certain printed sections together for binding, the various sections would be laid in piles along a table and girls would walk up and down taking one off each There are mapile in the proper order. chines for this form of collection but the plant in question was not large enough to warrant the installation of expensive machinery. The difficulty was overcome in a very simple way. A rack with shelves on which the piles could be placed, was built above the table and in that way each girl could gather the material without changing position. A mere detail, a very simple matter this, but it increased the amount of work done by each girl engaged on that branch of the work forty per cent. with less physical effort.

A change in the location of the shipping rooms of a departmental store resulted in a reduction of 50 per cent. in the delivery

It is in the solving of every day problems, in the detection and cure of minor defects, that the real efficiency is found. There is no business concern, no matter how perfectly managed or how restricted its scope of operations, that does not present opportunities for sweeping improvements when the details of management and organization are placed under the magnifying glass of efficiency.

B USINESS organizations are like a chain. No organization is stronger than its weakest link. In a manufacturing plant where each department depends upon every other department, the production is equal only to the capacity of the slowest department. If a weakness develops at one stage of the manufacturing process, production throughout the whole plant lags.

This is one of the basic truths of effici-

When an efficiency man is called in to diagnose the internal disorders of a concern engaged in any form of production, his first effort is invariably to locate the weak iink. Once he has laid his finger on the department which is holding up the producing capacity of the whole plant, it is a comparatively easy matter to find a remedy.

"We can't keep up with our orders," said the Manager of a large printing concern which specialized in the higher grades of work such as catalogues, col-ored calendars, etc. "We had our plant overhauled from top to bottom, we have rearranged the positions of our various departments with a view to facilitating the work. All departments engaged in the preparation of matter for the press have been reorganized and keyed up to meet the increase in our business. Our bindery is running smoothly and capable of handling a larger volume of work. But we can't get the same results from the connecting link-the press room. We have a good plant, careful pressmen, and a thoroughly experienced foreman. But they simply can't hold up their end.

The manager had called in an expert whose specialty was the ironing out of creases in the fabric of industrial production by the hotpoint iron of efficient supervision; and stated the case to him as above. The problems that had so puzzled the management of this plant had no terrors for the efficiency man; he had a system of investigation which obviated all difficulties and made results certain.

With an assistant he stayed in the press room for two weeks and during that space of time every happening was recorded and charted. All delays in the handling of stock, all breakdowns on the presses, the causes of breakdowns, etc., were duly noted and classified. At the end of the two weeks it was known why the presses had not been printing as much matter as the other departments of the plant were prepared to handle.

The chart thus prepared proved conclusively that the presses, working below capacity, were quite adequate to handle all the work that came to the company. An intermittent succession of delays had resulted in keeping the press room behind. The next step was to divide the delays recorded on the chart into two classes, "Avoidable" and "Unavoidable." Attention was then closely focused on the de-lays which had been designated as Avoid-

able; and much to the surprise of the foreman of the department, breakdowns on the presses were listed as Avoidable.

The remedy suggested for the situation created by the continual succession of breakdowns was a more careful overhauling of the machines and more frequent replacement of parts. The delays for the most part were due to breakages in the gears. Now a gear, which costs about 20c when new, if used long enough will break and perhaps tie up a press for from 20 minutes to an hour and necessitate the services of one or more experts for that length of time, without taking into account the loss entailed in delay to the whole plant. The custom pursued in the department had been to replace a gear when it showed signs of wear and not before; resulting, of course, in a certain amount of breakages. The system advised was to replace all gears after they had been used for a restricted length of time and before they began to show any signs whatever of wear. This increased the cost, but absolutely eliminated all breakdowns caused by breakages of the gears. Delays costing hundreds of dollars were prevented by increasing the purchase of 20c gears.

The second most prolific cause of decreased production was easier to find and correct. The presses were supplied for the most part by automatic feeders and, as much of the work done was on heavy cardboard sheets, the feeders had to be replenished at frequent intervals. work of bringing up fresh supplies de-volved on boys. The pressmen seldom thought to summon a boy for a fresh supply until the stock on the feeder had been practically exhausted. If the boy happened to be some distance from the machine a few minutes would elapse before he could bring up the fresh supply. The chart demonstrated that on an average a minute and a half had been lost on all the presses every time that a replenishment of the stock was necessary. As each press required fresh stock on an average of 50 times a day this meant a loss of 75 minutes each day on each press from that one cause alone. The delay each time had seemed insignificant to the foreman of the pressroom, the brief cessation of the presses at these intervals had seemed a small matter in the din of that huge plant. But taken in the aggregate the amount of time lost was staggering. The losses recorded on the chart from this one cause carried home with a rude shock to the minds of the heads of that concern the magnitude of the small detail.

Acting upon the conclusions drawn from the efficiency man's chart, it was soon found possible to, secure the desired increase in production from the presses.

THE inefficiency found in some concerns rests in the lack of proper system or equipment. Quite as frequently it lies in the personnel of the concern. No business is stronger than the weakest link in its personal chain. In the evolution of a certain product where the article passes successively through the hands of various workmen, the production will be no greater and no less than the capacity of the slowest or least expert of those men. If the executive head of some department

is not holding up his end or is permitting laxness to creep into his department, all the brilliant and hard work of his associate executives will not, succeed in raising the business above the standard forced upon them by the inefficiency of that one branch.

Efficiency methods applied to any concern-properly applied-inevitably point to weaknesses in the personnel as well as to the shortcomings of the system.

It is sometimes found that the men who seem to work the hardest are really the least efficient. Scattered efforts, giving a semblance of extreme absorption, are not effective. Some men will work 8 hours in a seemingly leisurely way and accomplish infinitely more than other men who work 16 hours at fever heat.

The president of a large store became convinced that his personal staff was not sufficiently efficient. Work seemed to drag. It was rare indeed that things kept up to schedule. Frequently the president himself had to help his subordinates in finishing up belated detail work. After making some fruitless investigations on his own account, the president called in an efficiency man and outlined the symptoms to him. Hunting for the weak link the efficiency man picked upon the secretary of the president and put him through a rigorous cross-examination.

"You are continually behind with your work," he said. "Part of your work slides automatically to other members of the staff. It is putting the whole staff behind. What's the trouble anyway?"

They were talking in the outer office, close to the door behind which sat the president. As they spoke a buzz sounded

from the inner office.

"That's the trouble," said the secretary. "The boss is to blame. That infernal buzzer is going from morning to night. He touches the button if he wants a paper hunted out for him from his basket. touches it if he forgets a name. Half a dozen times each day I go in there and find that he has already recollected whatever he had summoned me to ask about. Half my time I am running back and forth and don't get a chance to finish my work. Some of the others here have to help me and their work gets behind. starts at the top and goes on right down through to the office boy."

The expert decided upon the invariable cure for a weakness of this descriptiona chart. He had the secretary note down the exact time of every summons received from the inner office and the reason for it. This was kept up for three days. evidence thus collected was a terrific indictment of the ambitious, hard working, aggressive president. During the three days he had averaged thirty-four summons a day to the secretary, most of them for reasons so trivial that in the aggregate they stamped him as either a martinet or a weak-minded busybody. But he wasn't either; he was a business man of ability with such an exaggerated idea of his own power that he believed it wasting valuable time to look for anything for himself-and accordingly so upset the man directly beneath him that the whole machinery of his personal staff was thrown out of gear.

Continued on Page 72.

#### Ringers Three: By BERT THOMAS Illustrated by DUDLEY WARD

was a hot after-August noon after strenuous practice in the sun that Dick Darrell formerly of the Montreal Shamrocks and now one of the brightest lights in the Blankford all-

star team, ap-proached Jack Sprout, who held the joint position of manager and trainer.

"Any objection to my picking up a little on the side?" he asked. "I've had half a dozen offers lately to play for teams here and there, under other names, of course. It'd be pretty good practice for me. I'm finding it hard to keep in shape this year, Jack. What've you got to say about it?"

"If you got caught at it, Dick, you'd be fired out of amateur sport," said Sprout. "We can't take any chances with our players that way. Anybody on this team caught ringing gets fined one hundred bucks. That's all I've got to say about it."

That seemed enough. That evening Dick Darrell communicated the manager's dictum to one of his fellow players, Tack McGraw, who had also received tempting offers to officiate as a "ringer" for various of the smaller teams in Western

"That settles it," said Tack Mc-Graw, savagely. Tack was contemplating matrimony and consequently was keen on potting every stray dollar that showed above the skyline. "Don't see why Sprout has to be so doggone mean about it. It ain't going to hurt him any if we make a little on the side.'

"We've got the whip hand on the management if we want to use it, said Darrell, after some thought. "The people of this town are so crazy about their team they'd lynch the management if the two of us

threatened to quit. As things stand we could hold up the management and make them hand us over the keys to the town funds. So what's wrong with us just slipping out of town for a day or two next time a decent offer comes along?"

"That sounds like common sense to me," replied Tack. "Next club that thinks I'm worth a hundred bucks for one game under an assumed name, gets me. I'm not going to pass up the price of an elegant parlor set for any rough-neck like Jack Sprout."

It so happened that this conversation occurred in a quiet corner of the rotunda of J. W. Dunn's hotel, Dunn being the secretary of the lacrosse club. As the two star home men talked, an unobtrusive stranger, sitting on the opposite side of the lobby, eyed them with the most frank interest. He was a shifty-looking individual with a moustache of the heavydrooping variety. He wore a light summer suit with heavy black boots and a stiff felt hat; which, even in Blankford labeled him as a product of the long grass belt. Screw-

They went through an uncut hay field, over a couple of fences and finally struck a ditch with a foot of muddy water in it.

ing up his courage, the stranger clumped awkwardly across the tile-flagged lobby and dropped into the chair beside the two players.

"Pardon me," he said, breaking into their conversation, "but am I talking to Dick Darrell and Tack McGraw?"

The imported stars who made up the Blankford team had been lionized to such an extent that they had come to avoid natives of a conversational turn. Darrell and McGraw rose simultaneously and started to move off.

"You got us tagged right, stranger," said Dick Darrell, "but you're wrong in the other respect. You're not talking to us. We're going."

"Just a minute, please," pleaded the the stranger earnestly. "I want to talk business to you. I got a proposition."

Tack McGraw thought he detected a metallic chink in the tones of the man of the drooping moustache and the sartorial incongruities. Accordingly he sat down again and prepared to listen. Darrell did not sit down but stood by in an expectant attitude.

"My name's Perks and I'm president of the Huronville Cres-cents," went on the stranger, hurriedly, "I suppose you know just how we stand up there

McGraw hazard-ed a bold guess. "You won your district, didn't you?"

Perks bobbed his head in affirmation. "We sure did, Mr. McGraw.

we're to play off with the Sebring Stars who've won district number two. If we can lick them we got a great chance to land the intermediate championship. And we could trim them to a frazzle too, if the executive committee had ordered us to play off on neutral ground. But instead of that they ordered us to play home-and-home games and the Sebring crowd ain't ever been beaten on their own grounds. They'll run up such a score there that we may not be able to pull it down when we get em back to Huronville. That is, of course," and Mr. Perks leaned forward and whispered confidentially, "unless we take a hum-dinger of a team when we go to Sebring."

Dick Darrell slid back into his chair and prepared to take an interest.
"We talked it over the

other day," said Perks glancing furtively around to make sure that no one was within eavesdropping range, "and decided to take a few ringers up to Sebring-the best that money could get. Naturally we decided to try after some of you fellows here in Blankford. I had a copy of the Blankford Era in which pictures of the whole team appeared and we picked out three men that looked enough like three of our own men to pass for them in a strange town-Mr. Darrell, Mr. McGraw and Mr. Rogers was the three. Now I've got three hundred dollars to offer you, gentlemen—one hundred apiece and all expenses paid. What do you say to that?"

It was perhaps more than a coincidence that the method of selecting the three men that Huronville needed had resulted in picking the three best men on the Blankford team; for Darrell and McGraw were recognized as the most effective pair of home men playing that season and big "Red" Rogers was the greatest coverpoint that ever broke up an attack.

"Money talks so I guess you've said something, Perks," remarked McGraw. "When does this game at Sebring come Off?"

"Next Thursday."

"Think we could make it, Dick?" asked

McGraw doubtfully. "We got a game here in Blankford on the Saturday, you know.'

Darrell frowned and shook his head.

"No, that puts us out," he said. "We wouldn't be in shape for the Saturday game. We can't take no chances on getting in wrong with t h e management here for a measly hundred dollars."

"I should say not," asserted Tack fervently.

Perks hesitated. He belonged to the fairly promiscuous type of men who hate to part with specie. After a painful but brief mental calculation he remarked:

"We might raise the ante a little. Say, we make it twentyfive more?"

"How would it be handed over?" asked McGraw.

"Half when you get on the train with us at Huronville and the other half after the game."
"Done," said Dar-

rell and McGraw together.

T HREE men with grips and lacrosse sticks stepped off the 11.25 train at Huronville the next

Thursday and were hustled over to the nearest hotel by a patently anxious committee. It was a warm day with a clear sky overhead-ideal lacrosse weather. The newcomers judged, from the crowded condition of the streets, that the whole town had laid off for the day.

"We're running a special tram to Sebring," said Perks. "It leaves at one sharp so we better get down to the dining-room now. But, just a minute, gents, there's one or two things to be talked over first.'

Perks was perspiring with a copiousness that bespoke mental perturbation as as atmospheric humidity. polished his receding brow nervously with a red handkerchief.

"You're going to play as three of our own men," he explained. "The Sebring crowd ain't seen our men at work but they got a line on us and we've got to be careful. Your name for the day, Mr. Darrell, will be Hayes-Hank Hayes. Please get that fixed in your mind. You look enough like Hank to be his brother, so there won't be any trouble on that score. Your name,

Mr. McGraw, will be Jack Binderslat."
"Binderslat! That's a rotten name to wish on to a fellow," growled McGraw.
"Can't you pick out a better one for me than that?'

"I'm sorry, old man," said Perks, hur-

"What for?" de-manded the scion of the law suspici-TRESPASSERS DROSECUTED DIDLE! ATARD

> riedly, "but you see you're playing Binderslat's position and I'm afraid the name has to go with it. You'll want to remember the nickname the rest of the boys have for him—Lucy. They'll probably call you that on the field."

"Now, what the--" began McGraw, getting red in the face.

"Lucy!" yelled Darrell, doubling over with laughter. "What a nice little name for a six-foot boiler-maker! Will he have frills on his uniform, Perks?"

Before McGraw could frame a suitable rejoinder, Perks came forward with further explanations. He spoke very reluctantly this time.

"Binderslat has a red moustache," he

"Then, thank heavens, that lets me out!" ejaculated Tack, with positive relief. "You'll have to put me in some other position, Perks. I couldn't raise a moustache on such short notice. And if I did, it wouldn't be red."

"But you could wear a false mous-

tache," put in Darrell. "Isn't that what you're driving at, Perks?"

"Well, yes, that was the idea," admitted the president, mopping his brow with redoubled energy.

McGraw picked up his grip and lacrosse stick and started for

the door.

"I'm going back on the next train,' he said positively. "I'm a lacrosse player, not an actor.

"Come on, Tack, be a sport," urged big and good-natured "Red" Rogers. "It'll add to the fun. You'll look good with a red moustache, honest you will."

"And if Mr. Rogers is so accommodating about it you ought to be," urged Perks much relieved now that the worst was out. "You see he'll have to-"

McGraw put down his grip and faced about expectantly.

"What will Rogers have to do?" he asked.

"He's taking the place of a man named Clem Rodd," explained Perks.
"And this Rodd well, he's deaf and dumb."

Darrell and Mc-Graw literally tumbled into each other's arms and rocked back and forth, shaking with laughter.

"That settles it!" roared McGraw. "If Rogers plays the dummy I'm game to wear the red moustache."

Rogers was a slowwitted fellow when it came to conversation and in the face of the raillery of his companions all he could do was to scowl

at them and utter a low growl.

"That's fine," ejaculated Perks, with enthusiasm. "That's the only kind of noise poor old Clem can make. Just keep that up and you'll fool them all."

Darrell shook the big cover-point's hand with fervor. "You're a born actor, Red!" he cried. "Who'd ever have thought you had it in you? You'll play this dummy part better than Sarah Reinhart could do it herself."

"Poor old Clem!" ejaculated McGraw throwing himself into the situation with an enthusiasm now that equaled Darrell's. "I'll be playing a minor part in this little comedy after all."

"It'll be a tragedy if Clem here forgets he's a dummy and starts to talk," admon-ished Darrell. "Don't forget that for a minute, Clem. No matter what great thoughts come into your mind, choke 'em down unspoke. One word spoke in haste may cost us our scalps. These Sebring people are a rather savage lot, I judge."
"I'll be--" began Rogers; but got no further for his two companions promptly jumped at him and cut off all further speech by clapping their hands none too gently over his mouth.

"You can't talk! What do you mean by it?" expostulated Darrell indignantly. "Another word out of you and Tack and I 'll kick your slats in."

And so poor Rogers, bullied into submission, was led to the dining-room in mute misery. He sat opposite McGraw and glared impotently at the finger messages that the Irishman wafted across the table to him. McGraw was so busy practising up the deaf and dumb alphabet and stroking his luxuriant auburn moustache that he had little time for dinner.

THE trip from the station at Sebring to the lacrosse grounds was a great trial to Red Rogers, alias Clem Rodd. The male population of Sebring, more or less, was congregated at the station to witness the arrival of the invading hosts. To save time, the members of the team had changed into their uniforms in the baggage coach and, as they stepped off the train, each player was submitted to a close and hostile scrutiny.
"Which one's Clem Rodd?" Rogers

heard someone ask in the crowd.

"That's him-the big long-legged one," said another.

"Looks like a soft, big slob," put in someone else.

"Shh! You'll get him sore."

"Huh, don't you know he can't hear? The big stiff's a dummy!"

All the way to the grounds Rogers tried to appear unconscious of the audible remarks of the crowd, who tagged at his

heels, commenting on his legs, his arms, his intelligence—or lack of it—his antecedents and his future. He could feel himself getting red behind the ears but, for fear of giving himself away, could not display resentment. For a man who had always submitted any criticism to the arbitrament of fists, the situation was somewhat trying.

The enthusiasm of Darrell and McGraw was dampened some on arriving at the grounds. The game was to be played, they saw, on a hay field. One side of the field and both ends had been roped off and behind the rope was the crowd-a rough-and-ready looking crowd too. seasoned lacrosse player can generally tell when there is something in the air that suggests interference from the masses. Darrell felt it in his bones that very little would be needed to bring that mob over the swaying, straining ropes.

On the open side of the field, the hav had not been cut very close and every few minutes in practice the ball would be lost. "A fine game this is going to be,"

growled Rogers, under his breath. "Shut up!" exclaimed Darrell, in real

alarm. "If the crowd gets on to us, they'll tear us to pieces. You keep that idea in your thick head, Red. Don't lose it for a second."

The game started and for a time play was pretty ragged. The uneven stubble bothered the Huronville players and they fumbled the ball and passed badly. On the other hand, the Sebring twelve were full of ginger and playing right up on their toes. If it had not been for the wonderful exhibition of defence play that the silent Clem Rodd gave, the Sebring team would have run up a big lead in the early stages of the game. As it was the big fellow stopped every rush and stole passes with a regularity that put the teeth of the Sebring crowd on edge.

"That blankety-blank dummy's busting up everything we start," said the Sebring field-captain at quarter-time. "I wish his affliction had settled in his legs instead of in his tongue."

No goal had been scored either way in the first quarter but the play improved a lot in the second. Nothing could hold down a couple of home men like Dick Darrell and Tack McGraw for long and in that second quarter they kept the ball moving around the Sebring goal. Three times they bulged the nets and each time the faces of the Sebring crowd grew darker and more threatening. The home team had a conference with the officers of the club at half-time and they came out for the third quarter with determination writ large, all over them.

Darrell whispered to McGraw: "We're in for it, Tack. They're going to beat us if they have to use meat axes.

Tack stuck his jaw out at a belligerent angle; he was a fighter from the drop of the hat. "They won't beat us!" he said. "Not if they use dynamite!"

"Don't get too fresh, Lucy," said Darrell, who was never too serious to have his joke. "They're just waiting for us to start something. Take my advice, Binderslat, and lay low.'

Well, play started at a lively clip in the third. The Sebring players rushed the pace, checking hard and fast. In order to hold them down, the Huronville team had to speed up to the same pace and for a period of fifteen minutes Darrell and Mc-Graw worked as they had never worked

Continued on Page 68.

# "The Unreckage"

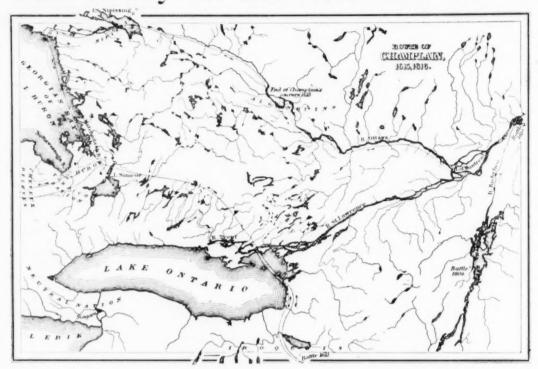
Two pieces of human driftwood, Beached on the sands of sin; Four eyes from retrospection Grown heavy as hearts within. The man-lacked honor, ambition; The woman-needed a friend. Neither could pierce the future, Nor cared to think of the end.

The name of their craft was Passion, But blindly they read it Love: One creeps from the Stygian darkness, The other drops soft from above. They sailed away on their journey, Cared not what the world might say. And the Lloyds that they keep in Heaven Just posted the Wreckage to-day:

"Two hearts ashamed and broken, Two memories seared with pain, Two lives just wantonly wasted, That can never be lived again."

-Eric A. Darling.

# The Story of the Hurons: By E. J. Hathaway



THE beginnings of Canadian history are interwoven in the most intimate way with the efforts of the monarchy and nobility of France and the Church of Rome to graft upon the new world a system which in the old had brought corruption, strife, warfare and suffering. They formed a brilliant attempt to grasp half a continent, saddle it with the exactions of a feudal Government and stifle it with the burden of a grasping hierarchy.

Primarily the discovery of America by Columbus, the venturesome voyages of Cartier, the energetic exploits of Champlain, the hazardous journeyings to the far West of Joliet, LaSalle and others were due to the lure of the distant Eastthe desire to find a short way to the Kingdom of Cathay and secure access to its fabulous wealth. Secondary only to this were the claims of colonization, the founding of a new empire, the desire for trade with the Indians.

For many years following the explorations of Cartier in the new world, France had little chance to take advantage of the opportunities opened up, and it was not until the beginning of the seventeenth century that the spirit of commercial enterprise and the zeal for discovery awoke and any real effort was made to develop trade or encourage settlement.

An unsuccessful attempt was made in 1600 to establish a settlement at Tadoussac at the mouth of the Saguenay River, in order to secure control of the fur trade. A few years later another was founded by DeMonts and Champlain at Port Royal in Nova Scotia. The existence of Port Royal was for some years of the most precarious character. The severity of the climate, the jealousy of rival merchants, the constant disputes between French and English as to sovereignty-these were all discouraging elements.

Meanwhile Champlain in 1608 founded Quebec at one of the places visited by Cartier seventy years before. Champlain, however, had ambitions beyond that of trading furs. From the Algonquins who came to Quebec to trade he learned of lakes and rivers beyond the rapids and he cherished the hope that by tracing back the interior waters to their source a western route to China, Japan and India might be discovered. His other great desires were to establish the power of France and to plant the Catholic faith in the wilderness of the new world.

The first winter in Quebec was severe enough to test the endurance of the most courageous. The little band of twentyeight that remained with Champlain was reduced to eight by the following May. With the return of the supply boat from France in the spring, the way was open for exploration and discovery. An agreement entered into between Champlain and the chief of the Algonquins to assist them against their enemies, the Iroquois-a federation of five powerful nations living in fortified villages within the present State of New York-resulted in the discovery of the Richelieu River and the lake that bears the name of the great French leader. By thus joining forces with the Hurons and Algonquins Champlain hoped to open the way to the discovery of territory otherwise inaccessible; and while he gained the antagonism of the Iroquois, he at the same time became indispensable to his allies, and at the close of the first expedition readily accepted their invitation to visit their towns and to aid them further in their wars.

In 1610 Henry Hudson, in an effort to find a north-west passage to the Far East,

had discovered Hudson Bay. Shortly afterward one of Champlain's young men, Nicolas de Vignau, wes sent to spend a season with the Algonquins in their country up the Ottawa. On his return he told a marvelous tale of finding a great lake at the source of the Ottawa, from which another river flowed northward leading to the sea. Upon the shores of the sea he claimed to have seen the wreck of an English ship, evidently that of Hudson, whose crew had mutinied. This sea was said to be but seventeen days distant by canoe from Montreal.

This direct firmation of his theory of a shortcut to the Pacific was so

important that early in the summer of 1613 Champlain set out to follow up the discovery, taking Vignau with him. They left St. Helen's Island, opposite Montreal, on May 27th. Never before had a party of white men penetrated this virgin country. The Ottawa, though navigable for much of the way, has many swift currents, tortuous passages and treacherous rapids. Day after day they toiled on, paddling in the clear currents, and pushing, dragging or lifting their canoes across the difficult They shouldered their boats through the dense woods around the more dangerous rapids, launching them again in the more quiet waters, and at night they made their camp on the edge of the woody banks. Not only had they the hardships of travel, but they suffered much from pests of mosquitoes by day and dangers from wild animals by night.

When they reached the Algonquin country the Indians told Champlain that the rapids in the river above were impassable, and Champlain was forced to accompany them to the headquarters of the tribe on

Allumette Island.

Champlain begged the chiefs to furnish him with canoes and men to take him to the country of the Nipissings on Lake Nipissing, some distance further north. The request, at first granted, was afterwards denied. The rapids and rocks in the river were dangerous, and the wickedness of the Nipissings was inexpressible.

Champlain urged his claims with all his skill. The young man Vignau had been there; here was his story and a map show-

ing the route he had taken.

The Indians were indignant. Vignau had spent the winter in their lodges. He had not been a mile farther north than they were at that moment. His story was a fabrication, his map an imposture. This proved to be the case. His desire for notoriety had been his undoing; and he had hoped that the difficulties of the journey and the dangers of the trip would have discouraged Champlain, and caused him to return without discovering his falsehood. There was now no good reason for continuing the expedition, and Champlain retraced his steps to Montreal.

Two years later, having spent the intervening period in France, Champlain returned again to Canada. He was accompanied this time by four Récollet priests, members of the Franciscan Order, for the purpose of ministering to the spiritual needs of the Indian population as well as to those of the French traders and settlers. They arrived at Quebec at the end of May, 1615, where, after choosing a site for their convent near the fortifications erected by Champlain, they built an altar, and on June 24th Father Dolbeau celebrated the first mass ever said in Canada. The congregation knelt on the bare earth, while the guns from the fort and from the ship in the river marked the occasion as one of special importance.

Father Jamay and Du Plesis were assigned to work at Quebec, Father Le Caron to establish a mission to the Hurons at their headquarters on Lake Huron, and Father Dolbeau to work among the Montagnais Indians on the St. Lawrence. Le Caron immediately set off to Montreal, then thronged with Indians on their annual visit for the trading of furs. The assembled Hurons and Algonquins also were eager for Champlain's assistance against the Iroquois. "With French soldiers to fight their battles," says Park-"With French man, "French priests to baptize them, and French traders to supply their increasing wants, their dependence would be com-plete." This was the policy of Champlain. The Hurons and Algonquins agreed to supply twenty-five hundred warriors; he would join them with all the men at his command; and a vigorous warfare would be opened against the powerful Iroquois. He returned to Quebec to make preparations for the expedition, and on his return he found that Le Caron, with twelve Frenchmen, had left with the Indians on July the first for the Huron country. Champlain, with two others and a party of Hurons, set out eight days later.

Their way as far as the Algonquin village was by the course taken two years before. From this point he advanced until he reached the tributary waters at Mattawa, leading to Lake Nipissing. An outlet at the western end of the lake led into the French River, which carried them to the great fresh-water sea of the Hurons, now known as Georgian Bay. Their course for more than a hundred miles continued south along the eastern shore of Georgian Bay, through the thirty thousand islands, to Thunder Bay at the entrance to Matchedash Bay near the harbor of Penetanguishene.

Champlain arrived in the Huron country on August 1st. On August 3rd he visited Carhagouha, a town surrounded by a triple palisade thirty-five feet high, where he found Le Caron engaged with the Indians in the erection of an altar.

Parkman thus describes the first religious ceremony ever held in the province of Ontario:

"The twelfth of August, 1615, was a day evermore marked with white in the friar's calendar. Arrayed in priestly vestments, he stood before his simple altar, behind him his little band of Christians the twelve Frenchmen who had attended him and the two who had followed Champlain. Here stood their devout and valiant chief, and at his side that pioneer of pioneers, Etienne Brule, the interpreter. The Host was raised aloft; the worshippers kneeled. Then their rough voices joined in the hymn of praise, Te Deum Laudamus; and then a volley of their guns proclaimed the triumph of the okies, the manitous, and all the brood of anomalous devils who reigned with undisputed sway in these wild realms of dark-The brave friar, a true soldier of the Church, had led his forlorn hope into the fastnesses of hell; and now, with contented heart, he might depart in peace, for he had said the first mass in the country of the Hurons."

The Hurons at the time of Champlain's visit occupied the district on the southeastern shore of Georgian Bay, lying between Matchedash Bay, Nottawasaga Bay, Lake Simcoe and Lake Couchiching. They were a numerous and powerful people, second only to the Iroquois in strength, in numbers and in methods of organization and government. They lived in villages and towns, many of them strongly fortified, and as early French writers estimate the population variously, it is inferred that migrations took place from time to time. Champlain estimates the number of villages as seventeen or eighteen, with the population at about ten thousand; but Brébeuf, twenty years later, found twenty villages and about 30,000 souls. In 1639 the Jesuit estimate is thirty-two inhabited villages and thirty-two thousand of a population. From this it will be seen that the number of people in the district at that time was as large as at the present time, including the large towns of Orillia, Midland and Penetanguishene.

Unlike most of the other Indian tribes, the Hurons were farmers, fishermen and traders, cultivating the land and raising corn, beans and other crops for food, and hemp for fishing lines and nets. From

other nations they obtained, by barter, supplies of furs, tobacco and other merchantable goods, which they traded in the East for such other articles as they required.

The country of the Hurons is one of

the most interesting archæological fields in Canada, and traces have been found of upwards of four hundred places, which beyond doubt, were the sites of Huron villages. The large number of places identified as village sites by reason of the ashes, debris, implements, fragments of pottery and other evidences of occupation, is accounted for in several ways. The domestic conditions under which they lived made it impossible to remain long in any one place; the land under cultivation, owing to the fact that repeated crops were taken from the same soil, soon became barren; the fuel supply gave out; the encroachments and harassments of the hostile Iroquois rendered a location untenable; any or all of these might at one time or another make it necessary to move from one place to another.

Most of the villages were situated in elevated places, because of their greater strategic value, and those on the southern and eastern fronts were strongly fortified by palisades as protection against invasion.

To the west of the Huron country was the country of the Petuns, called the Tobacco Nation, because they made a special feature of tobacco growing. In Southern Ontario from the Niagara to the Detroit River were the Neuters or Neutrals, so called because in the long conflicts between the Iroquois and the Hurons they remained aloof and took no part with one side or the other.

Champlain remained in the Huron country until September 1st, when the war party, now completed, set out on the expedition against the Iroquois. Their way lay along Lake Simcoe, across the portage to Balsam Lake, and down the chain of waterways known as the Trent River route until they reached Lake Ontario.

They boldly set out across the lake, landing near the eastern end, where, after hiding their canoes, they struck inland in search of the Iroquois headquarters, which they reached on October tenth. The enemy occupied a strongly fortified town south of Lake Oneida, which they defended with much skill. After nearly a week of futile fighting, during which Champlain himself received an arrow in the knee and another in the leg, the invaders began their retreat, carrying the wounded with them. The Hurons had promised to furnish Champlain with guides to take him to Quebec, but as he had not brought them victory they one and all began to make excuses. Nothing therefore remained but that he must return and spend the winter with them.

They reached Cahiagué, near the present town of Orillia, two days before Christmas, and here, with the exception of visits to neighboring tribes in what are now the counties of Simcoe, Grey, Bruce and Dufferin, and to the Nipissings in the north, he remained until the following May.



Samuel de Champlain.

Continued on Page 76.

# The Confessions of Sir Horace Lazenby

# By BRITTON B. COOKE

Illustrated by T. W. MITCHELL

SYNOPSIS.—Sir Horace Lazenby has been acquitted in court on a charge of trust making. He decides to take a holiday to get away incognito for a long-needed rest. This holiday he uses for the writing of an autobiography, telling his life story from the beginning, with the idea of justifying his operations in the realms of high finance. The story he tells starts with his home life in Garafraxa. He and his brothers run away from home and cross Lake Erie by stealing a passage in a grain boat, which results in the death of the two brothers. Young Lazenby makes his way to New York, where he secures a position in the baggage department of a railroad controlled by the famous John J. Vandervort. He is promoted to the position of private bodyguard to the millionaire railroader and ultimately becomes his secretary. One night Lazenby attends a party and leaves it somewhat stimulated by wine. He wanders along the waterfront and is seized and taken aboard an outbound vessel. The ship travels around the Horn to the British Columbia Pacific Coast, and on the way Lazenby has a fight, in which he knocks down the first mate who has abused him from the start. The fall kills the mate. Lazenby is acquitted of blame, but, to protect him from the friends of the mate, he is put ashore by the captain at Seattle. Here he becomes foreman in the employ of Johanna Stard, a firm-minded woman successfully operating a ship chandlery business; and meets her daughter, Pamela Stard, "the flower of fifty ports." Lazenby stays for three years in the employ of Mrs. Stard. On her death-bed she has him marry her daughter. After her mother's death, Pamela leaves for Canada and Lazenby follows her to Toronto where he secures employment in the grocery store of John Goss. From a customer he finds where his wife is staying and sets out to find her—with a strap in his pocket. After affecting a reunion with his wife, Lazenby gets into partnership with John Goss in the wholesale business and is largely instrumental in organizing an association of wholesalers.

PART VI.

REW men do any-thing — even the most violent of crimes - without having in their own mind, however hazily, some justification for the act. There lives in most men a second self which is continually approving or disapproving the conduct of the man. Conscience is the wrong name for the thing; it might better be called personal vanity. Most men refrain from lying because the lie reacts subtly against the liar's opinion of himself, his self-esteem. It is when the passions by main strength overthrow for a moment the government of the mind, breaking down the usual calmness of so-called conscience by weight of selfish argument and distorted reasoning, that the sins against Conscience are committed. In time Conscience comes to, and begins its course of nagging unless and until the misdemeanor is explained away by the sophistries of the intelligence.

When the board of wholesalers with whom John Goss and I had worked to wipe out competition, decided to raise prices above normal it was temporary love of money that swept the group of business men off its feet. Before the mood had passed off the order had gone forth to the Golden Star Corporation



When he returned he was smiling and smoking another cigar. "'S alright," he chortled, "you can skin him if you're quick."

of Toronto and the John Goss Company of Montreal-the two branches of the trust which were supposed, but only supposed to compete with one another-to raise the scale of prices all round "in order to meet increased overhead expenses." That was the phrase we used to justify our action in the eyes of our employees. The tra-velers of the John Goss Company of Montreal. not knowing the relationship between the Montreal concern and the Toronto concern, protested that people would refuse to pay the increased prices and that the travelers of the Golden Star Corporation would naturally be able to get all the business. They were surprised to learn however, after they had been told to go ahead and do their best, that the Golden Star Company had done the same thing, and price conditions so far as the travelers were concerned were the same as ever. The retailers, our customers, kicked-but they had to deliver their goods and had to come to us. A few of their customers kicked to them, but not many. The housewife often accepts an increase of one cent on a can of corn, as being quite beyond question. She does not feel that small item. The grocer who, because the price of sugar has been raised to him by the importers has to give half a pound less on every

quarter's worth, may not even tell his customer of the change. The woman's "little girl" is probably sent to the store with a slip of paper saying, "a quarter's worth of sugar," or it is asked for over the phone. or it is asked for over the phone. So with other goods. The customer of the retail store, buying as she does usually in small lots, scarcely notices the change. When the retailers kicked to us we told them things could not be helped. Prices had gone up. They would have to explain this to their customers and raise the price accordingly. Aiken, who had proposed the change of prices and who was the ringleader all through that campaign, made the change slightly easier by putting some misleading information about vessel rates in the way of a certain friendly reporter. It served, when it appeared in a Montreal paper and was repeated in other papers throughout the country, to support our increased prices. Also, the fact that the Golden Star Company and the John Goss Company both raised prices convinced the last of the protesting retailers that protest was in vain. Prices stayed up. Profits began rolling in to our company.

Did conscience bother any of the members of the board? Possibly; but we justified ourselves with the argument that the wholesalers had been losing money for years, through unbridled competition. The public had gained by that misfortune; it was now our turn to recoup. Sophistry? Of course. Talk to a burglar and he will justify himself with the utmost diligence, if not with conviction. I speak now of the average burglar; if you find one who has really reformed he will

lay all the blame on the devil.

The more money the two branches of the trust made the more the members of the board wanted. The more secrecy we had to practise in our dealings, the more fascinating the work became, till we found that air of secrecy pervading the whole of our offices. We transacted even the most commonplace matters in subdued tones. The chief managers carried the habit out of the board room; the sub-managers caught it from them and it permeated the whole institution clear down to the apprentices in the shipping-rooms. At the time I did not know it. None of us did; but my wife, coming into the warehouse in Montreal one day with our son, remarked it to me. I laughed at the idea. But she was earnest. She went on to say that I had even begun to show this air of secrecy in my own house and that she did not approve it. "It is furtive," she said, "and it doesn't become any man to have to hide things!"

I know now she was right.

But we could not stop doing secret business because we could not stop our illegal combination. Although no one had ever told us it was illegal we seemed somehow to sense it. There was not a man among us that did not know he was doing wrong, and know it by nothing more than instinct. Once, I had a fleeting thought of calling a halt to the thing and I thought once or twice that other members of the board felt uneasy and would have been glad to broach the subject; but at the board meetings there was always the air of official rightness about things, that deceived us. There were the formalities of bookkeeping and auditors' certificates that made everything seem so very honest.

Our Montreal manager was one of those old-fashioned Canadian business chiefs whose very manner was honesty itself. We directors hid behind his skirts. Looking at him we felt sure we were doing an honest business.

Were we?

No!

Then came the natural consequences. Greed begets greed and the appetite for more is never whetted. With our success in the wholesale business several of the members of the board started branching out in other lines of business. I had accumulated a bank credit and I sought means of employing it. I wanted something outside the wholesale business, on the principle that it is unwise to keep all one's eggs in the one basket. Other members invested in banks and two became directors. John Goss was overtaken, after a life-time of sober industry, with a mania for patents. Great money had been made in patents, he said, and he intended to see if he couldn't buy out the rights on some sort of a good thing. He did! But because he had no knowledge of how patents should be drawn and because the patent lawyer had not cared sufficiently about the interests of the inventor to see that it was a basic patent instead of a mere patent on the frills of the idea Goss lost heavily.

There were nine directors of us, all told when in 1898-we had formed the trust in 1895-we determined on the price-raising policy. Out of the original twenty most had sold out their shares to the nine. By 1899, Aiken, of Aiken Brothers-the man who had previously led in the price-cutting campaign and who had been brought into the organization only after we had resorted to extreme methods-was now the chairman of the board and the only one of the nine who really attended to business. Aiken had no side-lines. His one interest in life was the trust-that is, the Golden Star Corporation and the John Goss Trading Company of Montreal. When in 1900 John Goss wanted to sell out-for his patent business had all but ruined him-he sold to Aiken. I might have suspected something at the time.

WITH some of the capital which I had managed to collect, and with the credit which my connection with a successful wholesale concern gave me, I had bought out a knitting mill in a western Ontario town. There had come to me one day a poor thin creature of a man called Bradburn-Percival Bradburn was his full name. He had learned the knitting business over in Bradford, England. He had bought a few machines and had started into the manufacture of stockings, mitts and plain hosiery in a village on the lower part of the Grand River. His wife superintended the workings of the little factory-they employed ten hands-while Bradburn traveled on the road getting orders for his goods. He had been making a considerable success when, this particular spring, the Grand River went on the rampage and swept out the dam from which he obtained power. If this had been the first loss in this way it might not so much have mattered, or if it had been the second. But it was the third time Bradburn found himself called upon to replace a heavy dam. He came to Toronto ex-

hausted by a three-day vigil during which he and the wife and all the mill hands had been at work, poling the great ice-floes over the spill-way so that they would not catch and hold back the angry water. Finally one great floe stranded across the spillway. The water rose at once, running into the first floor of the mill itself. They tried to dynamite the opening but failed. In the middle of the night as the little handful of workers toiled with rods and axes to clear the path of the angry river, the embankment on which they stood shuddered, sagged-and gave way to the flood just as the last of the workers reached a safe place on the higher part of the shore. Percival Bradburn came to me -I was in Toronto at the time-for capital to rebuild his dam. It was only a paltry sum he needed but it was more than the banks would give him. They had financed the two previous dams.

On principle I refused the offer. "Five thousand dollars for a forty-nine

"Five thousand dollars for a forty-nine per cent. interest in your business!" I exclaimed. "A partnership! Too much!"

He went then to my various fellow-directors—for our board included most of the men who were like j to be interested in investments of the size Bradburn was offering. One and all turned Bradburn down. I suppose he might have gone further and found someone else to help him out, but for some reason he came back to me.

"Won't you re-consider your decision, Mr. Lazenby?" he said. He was a pathetic sort of figure, sick with anxiety and nervous in the presence of one who had, as he seemed to think, the means to save him from disaster. "I've got a big order from the Eaton Company. I've promised delivery on the stuff in time for the fall trade—and it must be put through. On what conditions will you back me?"

"I am not interested in the knitting business," I said.

"But there is money in it!" he pro-

tested.

I knew this but I shook my head.

"I might try to do something to help you out," I said. "But I should want to have the business reorganized as a company—I couldn't consider a partnership." "Then a company it is!" he shouted in

glee. "Put in five thousand Mr. Lazenby
—just five thousand—and we'll give you
forty-nine per cent. of the stock. That's
fair."

"Who are we?"

"We? Oh, that is, my wife and I." Somehow I resented the idea of a woman being in the deal.

"Your lawyer and mine can draw up the papers and apply for the charter," I said. "When that is done I'll give you my cheque."

"Oh, but — couldn't you advance the cheque under an agreement so that we can start on re-building the dam at once?"

He seemed on the verge of breakdown at the mere thought of further delay.

"Very well," I said, "I'll advance you five thousand dollars under an agreement. I have seen your books. I know what your orders are. You can assign me all book debts in the *interim*. Fix it up that way. Tell your lawyer to see mine this morning."

"Right-o" he answered cheerily.
The money was advanced, the company

papers put through and my first venture in the manufacturing business set going. The new dam across the Grand River was completed in thirty days. We had a twelve-foot head of water and a spill-way specially designed to take care of floods and ice. The chatter of the knitting machines was soon resumed in the mill. The big order was sent out on contract time and a repeat order was placed with us. With Bradburn on the road and his wife superintending the little factory we were making money. I complimented myself on having taken over the investment.

But I was not to be content with only this sort of an interest in the knitting business-for I fancied I saw even then how the business would expand. I remembered my experience in the wholesale trade and I determined to play the same game in the knitting trade. The poor little mill which Bradburn and his heroic wife had set going was doing what, for them, seemed a great business, but it was scarcely a drop in the bucket with me. That was the feeling I had at the time. My first success had gone to my head. Through my bank connections I started inquiries as to other knitting mills in the country. There were quite a number of them, I learned. Several small mills were in a bad way owing to the change from ordinary waterpower to electricity and other forms of power, but in the main they were all on a sound basis.

"The beauty about the milling business," I said to my Pamela one night, "is that we are not up against the same kind of outside competition. The English and German mills turn out stuff for milder

climates than ours and they haven't yet found a big enough trade here to justify their coming in. That is our chance." "How our chance?" asked Pamela.

"Yours and mine," I replied, "--to make money.'

"I could do with less money," she sighed, "and have you oftener at the house-here with the boy and me."

"The boy is still no better?"

She led the way to the side of the little

lad's bed.
"Look!" she said, and I examined the twisted hip and spine as he lay there asleep.

"Can't you forget business for a little while?"

"With money we could take him to have him treated," Europe and countered.

"No," she said, "You know what the French specialist said a month ago?"
"Hmph!" I retorted, "he needn't have

been so blunt about it."

We said very little more just them.

Next day I bought a small mill on another part of the river from the Bradburn mill. This one was devoted to the making of underwear. I retained the same superintendent who had been running it before, having contracted, meantime, with the previous owner for his good-will. Then I went down to see Bradburn.

He was just in from the road and was going through our tiny plant with his wife-a wonderfully capable sort of wo-

man, not delicately made perhaps, but a fine, sturdy type of Canadian help-mate. As I came up they were chuckling over a deal which he had just closed with a rival firm of the great department store with whom the previous order had been placed.

ers of the department store advertising work overtime during the week before.

"And do you know what I'm going to sell them for a feature?" exclaimed Percival in his thin cackly voice.

"A cotton mixture?"

"No Lady," he had a funny habit of calling his wife Lady. "We have taken on a contract to sell them ten thousand pairs of women's and children's black hoseto retail at ten cents a pair!"

"Percival!" she exclaimed. "You can't

do it?"

"O yes we can. See-" It was at this point that I joined his audience but without interrupting his enthusiastic outline of his scheme. "Instead of knitting on the heel and the foot we'll make them up separately and then have the girls sew 'em on by machine."

"Good!" she echoed.
"Good!" I agreed. Then, after that subject was closed, "Made a good trip Bradburn?"

"First rate!"

"Want to make more money than ever?" "Do we, Lady?" This to his wife. "Just lead on, Mr. Lazenby."

"I want you to carry underwear as a side line."

"Underwear! But we only make hosiery. We haven't the machinery for underwear and besides-

"I have bought out the Pearson millthe little water-power affair near Galt. Take these goods as a side-line and thenwhat do you say to enlarging the company so as to include both mills.

"That would give you control," declared the wife, bristling at the thought that her husband might be crowded out. protection would that give us?"

"What assurance have I, for that matter, that you two won't crowd me out of my interest in the Bradburn mill?" I

"How do you mean?"

"You might let the mill go to pieces or pretend to go to pieces and you might let business fall off on purpose until I would be very glad to sell out my share for a song? Mightn't you?"

"But we're honest!" snapped the woman, "we don't do business that way."

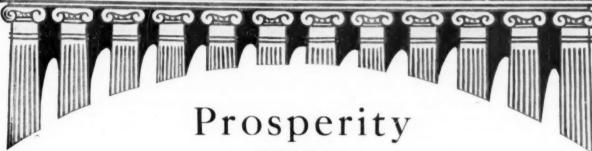
> company," I said. "That's the case," Bradburn admitted. "We can't expect to keep control, I'm afraid, and at the same time it might be to our t o advantage come in on this other deal. We'll talk it over. What terms were you thinking of, Mr. Lazenby."

The matter of terms we discussed and finally came to a settlement. The Bradburns were satisfied and so was I.

Continued on Page 78.



# TWELVE PILLARS OF SUCCESS



NUMBER SIX

THE story is told of a young man

# By Dr. Orison Swett Marden

in life who went to a multi-millionaire, the late Collis P. Huntington, for advice as to how he should proceed.

"Take ten thousand dollars and go into the business of raising rubber trees," said the railroad magnate, as though ten thousand dollars were a mere bagatelle that anyone could lay his hands on at a moment's notice.

But the young man didn't have ten thousand dollars, and didn't know how or where to get them, and so he went away sorrowful.

This recalls the story of that other young man who was anxious to succeed. You remember how he went to the Christ and asked him the question, "Lord, what shall I do that I may gain eternal life?" And our Lord said to him, "Go, sell all thou hast, and give to the poor, and follow me." And the young man turned away sorrowful, for he had much goods.

Now the man who doesn't want to succeed is not worth his salt. But there are many brands of socalled success, and the supreme question is, What sort of success are you after?

The aspiration of the young man who went to Collis P. Huntington for advice was a perfectly legitimate one. He wanted to raise himself to a position of independence, which must be the aim of every young man who will ever amount to anything. When a man ceases to have that ambition, the salt will have gone out of him. Equally, if he becomes so absorbed in the pursuit of material gain that he develops into a mere money magnet, he is as great a failure as if he had never aspired. For the meaning of any success worthy the name is Service—Service to mankind.

This is the lesson that Christ taught to all men through the young man in the Gospel, and through the entire course of His life on earth. But the young man would not follow him. He was not willing to serve in the way the time needed and our Divine Master wanted him to serve. He loved money better than service. His heart was in his possessions, and so when he was asked to part with them he turned away sorrowful—probably to spend the rest of his life in adding to them.

Nowhere in the Bible do we find the condemnation of money; it is only of the *love* of money. But we do find this very significant text—"The destruction of the poor is their poverty." Every investigator of slum life in our big cities knows, every

Swett Marden of the unfortunate poor in our midst proves, that this is an absolute truth. There is no denying the fact that poverty is responsible for more ignorance and crime, more discontent and unhappiness, more

record of the lives

suicides and ruined ambitions, more wrecked hopes and homes than almost anything else.

No young man has a right to remain in a position, if it is possible to get out of it, where he will be constantly subjected to the great temptations of poverty, which in many instances are greater than those of wealth. His self-respect demands that he should rise above it. It is his duty to put himself in a position of dignity and independence, where he will not be liable at any moment to be a burden to his friends, or to the community in case of sickness or other emergency.

Instead of encouraging poverty or lauding its blessings, it is our duty to get away from it, and to help others to do so. Socialists and reformers of all kinds are working toward this end in various ways. The question is not whether their methods are right or wrong, but whether or not there is a more potent method than any yet in general operation for successfully dealing with this question? I am firmly convinced that there is.

The poverty curse is not a decree of Providence. It is the result of ignorance and laziness—more often the former than the latter. Every human being on this earth could be living in comfort if he knew the powers locked up in himself and were willing to work and make the best use of them. The Creator has provided an abundance of everything for the supply of human needs. We are living in the midst of a stream of inexhaustible supply. It is our own fault if we do not take what we need from this stream.

You can make yourself a prosperity magnet, or a poverty magnet. You are free to choose, and everything depends on your choice.

Before your life can be effective you must make yourself a magnet for the things that will make it so. You must learn how to attract prosperity, how to draw to you all that will help you to succeed in your work, to attain your ambitions, whatever they are. Most people make themselves poverty magnets, failure magnets. They attract poverty and repel the very things they long for most. By their mental attitude, their doubts, their fears, their anxieties, they drive away prosperity. They do not half believe they will get the things they feel are theirs by right. Thoughts are magnets which

attract things like themselves. If you want to become a prosperity magnet you must not only think prosperity but you must also turn your back resolutely on poverty. You must begin to-day, this moment, to face the other way. Resolve that you are going to have nothing more to do with it; that you are going to erase all the black, poverty-stricken pictures (which attract more poverty) from your mental gallery by putting prosperity pictures in their place. What we get in life we get by the law of attraction. Like attracts like. A poverty-stricken appearance draws you toward poverty. If you don't look prosperous, assume a prosperous appearance at once. Whatever you may have managed to get together in this world you have attracted by your mentality. You may say that you have earned these things, that you have bought them with your salary, the fruit of your endeavor. True, but your thought preceded your endeavor. Your mental plan went before your achievement. The mental plan always goes first; the vision before the reality.

The text, "He that hath a bountiful eye shall be blessed," is the expression of a fundamental truth. The pictures you make in your mind's eye, the thoughts you harbor are day by day building your outward conditions.

The more you think and visualize favorable conditions the more you increase your power to realize them. You make yourself a prosperity magnet. This is its law. But if you allow yourself to hope one day and to despair the next, your are demagnetizing yourself as fast as you magnetize. You are destroying the pulling power of your prosperity magnet. You are neutralizing its affinity. You are making it a poverty magnet. Apparently you are trying to get something, while most of the time your mind is working in the opposite direction and driving it from you.

We are so made up that about all we get in life is the reflex of what first flows out from us.

If you are sending out a perpetual poverty current, a doubt current, a discouragement current, it does not matter how hard you may be working in the opposite direction, you will never get away from the current you set in motion. The sort of thought current you generate will flow back to you. The poverty current will never bring back the supply current; it will bring back more poverty. The failure current will not bring back success; it will bring more failure. This is a law.

You must think in a positive, determined way that you are going to succeed in whatever you desire to do or to be before you can expect success. That is the first condition by which you can make yourself a magnet for the thing you are after. It doesn't matter whether it is work, or money, or a better position, or health, or anything else. Your thought about it must be positive, clean cut, decisive, persistent. No weak, wobbly, "perhaps-I-mayget-it," or "maybe-it-will-come-some-time," or "I-wonder-if-I-shall-ever-be-this,-or-if-I-can-do-that" sort of thought will ever help you to get anything in this world or the next.

When young John Wanamaker started with a pushcart to deliver his first sale of clothing, he turned on a positive current toward a merchant princeship. As he passed big clothing stores he pictured himself as a great merchant, owner of a much bigger establishment than any of those he saw, and he did not neutralize or weaken this thought current by doubts or fears as to the possibility of reaching the goal of his ambition.

Most people think too much about blindly forcing themselves ahead. They do not realize they can, by the power of thought, make themselves magnets to draw to them the things that will help them to get on. Wanamaker attracted to himself the forces that make a merchant prince. Every step he took was forward, to match the vision of his advance with its reality. If the young man had been

satisfied with himself at the start he would have remained in his first little store in Philadelphia, and would never have become one of the greatest merchants the world has

Failure is largely a disease. When men begin to fear, begin to worry, begin to be haunted with a foreboding that they are going to fail, they invite the very condition they fear. It is a mental law that whatever is held in the mind becomes the life pattern, and the life processes build in accordance with the design held up to them.

We are what we are largely through auto-suggestion. Our fears, our anxieties, our doubts, our discouragements, our despondency, all the enemies of our success are daily woven into the pattern of our lives. Why do we allow those enemy thoughts to have any part in our plans, in our life weaving? We can think what we will. We can open or close the gates of our minds to any thought, suggestion or emotion, beauty or ugliness, love or hate, poverty or opulence. What we shall or shall not think is purely optional with us, but the result of our choice is decisive and determines our destiny.

Someone has said that no one ever went to jail or to the poorhouse who did not attract the jail or the poorhouse to himself. A lifetime of observation and study of the question has convinced me that people who make miserable failures of their lives as a rule expected to do so. They had such a horror of the poorhouse, they lived in such terror of coming to want, that they shut off the very source of their supply. They had so warped their minds that they could see nothing ahead but poverty. They wasted the precious energy which might have been utilized in happiness building, in expecting, dreading and preparing for the dire things that might come upon them, and according to the law they got what they dreaded and feared.

How often we hear people who have entered a prize contest remark: "I am going to compete for the prize, but I know I shan't get it. Of course it would be foolish to think that I would be the only one out of thousands to succeed in winning the prize, but I am going to make a try for it."

Now. if you are going to win any of the prizes of life you have got to fling yourself into the contest for all you are worth. No half-hearted decision, no divided effort will do. You have got to be "all there," and you have got to believe you are going to win the prize. Every time you express a doubt of your ability to win you make your success so much less likely; you really rob yourself of so much efficiency.

There is only one way to acquire anything in this world, and that is to visualize that thing, to struggle toward it, think it, live it, until it is yours.

Here and there people are beginning to master the law of opulence. They are beginning to find that they can conquer poverty by making themselves prosperity magnets. That is, by thinking and working in conformity with it.

The trouble with most of us is that by our doubts, our fears, our unbeliefs, we dam up the channel of infinite supply flowing all around us. We cannot believe in the inexhaustibility of our resources and hence we ourselves pinch our supply.

When we affirm our divinity, and claim our heritage; when we realize that our birthright keeps us in touch with the very source of all supply; when we know that it was never intended that God's children should be poor or go hungry, that it was never intended they should live in poverty-stricken conditions, then we shall have struck the very basic principle of prosperity—the law governing every form of success.



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# Recruiting by Poster

From the Windsor Magazine.

HE Parliamentary Recruiting Committee, working in conjunction with the War Office, has been sedulously engaged for several months past in a vast campaign in which posters have played a very important part. The hoardings of the country have been covered with an infinite variety of pictorial and letterpress appeals to the manhood of the nation to come forward and take a share in that greatest of all fights, the struggle for national existence. The magnitude of this modern auxiliary to the efforts of the recruiting-sergeant has had the effect of attracting widespread attention and not a little criticism.

Some sensitive folk seem to think it very sad that a great country should find it necessary to resort to what has been stigmatized as "bullying by poster." But what alternative would they suggest? It was essential that something powerful in the way of appeal should be devised, and, in the absence of any form of compulsion, it was absolutely necessary to seek means to bring home to the masses of the people a sense of the seriousness of the situation and of their individual duty in this crisis of their fate. After all, the display upon the hoardings throughout the length and breadth of the land has been no more open to objection than the insertion of patriotic manifestoes in the columns of the news-

It can be confidently asserted that there has been no lack of effort on the part of those charged with the production and distribution of the posters. They have taken occasion by the hand, and have dealt with the varying necessities of the hour so as to seize the imagination of the people. Their incentive has been Lord Kitchener's demand for "More men, and still more, until the enemy is crushed."

The task of impressing upon the nation the vital importance of the issues involved has been difficult. But there has been no jockeying of the people. On the contrary, it has been recognized throughout that anything savoring of bullying the public would be indefensible, and that it must be left to the individual citizen to decide for himself. While the duty of the men of the country to the State and to themselves

has been emphasized, the "white feather" argument has been studiously avoided, and those who are entrusted with the carrying out of the scheme have been content to appeal to the patriotism and sense of personal responsibility of those whose attention might be attracted by the picturesque display upon the hoardings. Surely, under these conditions, success was deserved.

It is not claimed that the posters have any serious pretensions to be considered as works of high art. Some of them, it is true, may be fitly denominated admirably artistic; but, in the main, attention has been devoted to securing an effective and striking appeal, rather than to covering

# TO THE WOMEN OF BRITAIN.

- You have read what the Germans have done in Belgium. Have you thought what they would do if they invaded this Country
- 2. Do you realise that the safety of your home and children depends on our getting more men NOW
- 3. Do you realise that the one word "GO" from you may send another man to fight for our King and Country
- 4. When the War is over and someone asks your husband or your son what he did in the great War, is he to hang his head because you would not let him go

WON'T YOU HELP AND SEND A MAN TO JOIN THE ARMY TO-DAY?

the walls and hoardings of the land with a series of pictures which might rank high in point of artistry, but yet would lack the ability to enchain the attention which was essential. By common consent, however, it has been conceded that never before in this country has there been exhibited a succession of posters in which the standard of excellence has been so high.

Some idea of the extensiveness of this extraordinary campaign by poster can be gained from the statement that, at the time of writing, the individual posters issued under the auspices of the Parliamentary Recruiting Committee—which includes representatives of all the great political parties—number well-nigh ninety, that approximately two and a half millions of copies have been distributed, and that even higher flights were in contemplation by the committee. It will interest

many to know that some twenty million pamphlets and leaflets have been circulated in addition.

It is scarcely possible that the exhibition of millions of posters can have failed to produce useful results. It is manifestly impossible to gauge the influence which has been exerted by this medium; yet it is a reasonable asumption that a goodly percentage of those who have joined the military forces since the outbreak of the Great War have been directly influenced, if not entirly led, by the Parliamentary Recruiting Committee's publications. There cannot be the least doubt, indeed, that many a man has been brought to a final decision by the sight of one of the direct appeals to his manhood or his sympathy with the suffering folk over the sea. It has been well-nigh impossible to avoid seeing set forth in this fashion the reasons why the fit should enlist and the incentives which should appeal to the patriotic.

Efforts to drill a hole in a sheet of tantalum, 1-25 in. thick, with a diamond drill revolving at 5,000 revolutions per minute resulted, after 72 hours' continuous work, in wearing out the diamond and denting the metal.

## The Cultivation of the Land

From Contemporary Review.

A MONGST many lessons that the Great War is teaching England, none is perhaps more important than a careful consideration of land and

problems connected with it. Let us consider how Belgium, a small and not particularly fertile country, less than twice as large as Yorkshire, has been so successful in cultivating land. She is only one-eighth the size of Great Britain, but she has been able to feed her own people with home-grown fruit and vegetables, and also to export annually £480,000 worth more fruit and £230,000 worth more vegetables than she imports. When we remember, too, that most of her exports come to England, it should prove what our market gardeners could do for themselves if they chose. Between 1901 and 1905 the United Kingdom imported on an average, vegetables to the value of £2,638,787 per annum more than she exported, and the thought of the acres of intensively cultivated gardens that such a sum represents should urge our growers to fresh efforts. Apart from the possibility of blockade, and the delay that might occur in the delivery of food supplies, it indicates a considerable degree of national inactivity that such additional wealth, to say nothing of the health-giving properties of the gardener's profession, should be lightly passed by. Belgians who are at present in England assure us that they find it possible in their country to make a very good living indeed upon an acre of land and they become rich on two or three acres. How is this achieved? Can it be a better climate or greater soil fertility? No; the produce grown by our smallholders and nurserymen in any of the southern counties of England compares favorably with that of foreign countries, so it is not alone sunshine or rich land that are essential. To a considerable degree it is due to that innate love of the land, or land hunger, so marked a characteristic of "les braves Belges." There are many things that are conducive to this feeling, but none perhaps more so than the possibility of the poorest workingman eventually attaining the ownership of land.

Another advantage that the Belgians have over us is that from earliest childhood boys and girls receive sound, practical education in rural industries. Consequently, plowing, the care of animals, dairy work, milking, butter-making, poultry-keeping, marketing become part of a child's life, and any natural bent or talent for such work is fostered. Even those who have no liking for country pursuits gain help towards success in other careers by early initiation in healthy out-of-door work; they learn discipline and order, which are useful in any profession.

How is this excellent rural education given? Chiefly by means of primary schools, where subjects which are likely to be useful to country people are adhered to, and those that are unsuited to their probable future station in life are ignored. Then evering classes are available for those children who have left primary school and are occupied all day

on farms or in gardens. I understand that in Denmark the school hours are so arranged that they begin at 7 a.m. and cease at 1 p.m., thus enabling children to help their parents by working at home in the afternoon. Then, too, as they go to school only on alternate days they really can be counted on for a considerable amount of farm work. It is such a good plan to give young people many interests, and if a love of work can be acquired early, it is the happiest part of life. Our English children do not, as a rule, possess this, but in all probability if they felt their holidays helped to build up what might at some future time be their own, they would know that work was happiness, and not drudgery.

As the young people in Belgium grow up, there are traveling schools that they can attend; these remain for about three months at a time in one centre, and they teach agriculture, dairying, and domestic economy. Then, besides, there are official experts called Agronomes d'Etat, and over thirty of these are dispersed about the country. Each one has charge of a given district, and in it he promotes all farming interests, answers questions concerning diseases of crops or insect pests, and makes himself generally useful to growers. Four of these experts work in the office of the Minister of Agriculture; the rest collect all local information and report it to the central office. By this means the Government department is kept in close touch with experimental work, and is fully informed of what occurs in each country district, and the village people, on the other hand, feel that they have a good adviser in their midst, one who will give them disinterested, honest counsel

upon rural matters that puzzle them. In Denmark there are open-air museums, where ancient farm implements, old buildings, and pictures of rural customs are preserved, they contain objects that have been found in the neighborhood, and these help considerably to enlarge the ideas of country people, and to dispel monotony in their daily life. I believe, too, that in the waiting-rooms of small town railway stations there are often very good engravings hung upon the walls, by order of the Government, "to encourage a sound taste in art amongst the people." Perhaps if the cold, dull grey walls of our waiting-rooms had some of these pictures interspersed amongst the texts and Girls' Friendly Society rules that are there, good taste might penetrate to many a small front parlor. would be an end to gaudy poppyhead wallpapers, crochet antimacassars and overelaborate paper lamp-shades that offend the eye in those airless rooms, kept to be looked at during the week and sometimes used on Sunday.

Thus we learn that to secure intelligent interest in rural things, to encourage love of country life in young people is the first important step. After that, it is comparatively easy, by means of the advice and example of officials, like the Agronomes d'Etat, to establish organized, co-operative methods, which many of our best

farmers and our most successful marketgardeners still refuse to join in. For instance, a system of light railways would be attainable, an inestimable boon to workmen and their families, who could thus get to the neighboring town for shopping or work. Produce could be conveyed at cheap rates and "returned empties," those easily lost and often most harrassing packages, would reach their destination Then, again, seeds, manures, requisites and tools are purchased through co-operation at a reduced cost to the individual; bought in large quantities and then split up and divided amongst small people, each individual benefits.

In Belgium land is very much split up, and three-quarters of those who farm have less than five acres each, and 95 per cent. have less than twenty-five acres. According to our English ideas, therefore, it can be said that there are really no large landowners in Belgium, for the two largest possess only 30,000 acres between them. In the United Kingdom, on the other hand, there are hundreds who own over 20,000 acres each and several who have over 200,000 acres each. The existence of so many small farms and holdings shows how much more intensively their people cultivate land than we do, for otherwise they could not gain sufficient profit from a few acres. Another surprising fact is that the land is usually let on annual tenancy or a nine years' lease, a proof that a speedy return of profit has to be made. The law merely states that the tenant must cultivate "en bon père de famille," but there is no compensation to a tenant who quits his farm. This very casual kind of land tenure is only possible where the landlords thoroughly understand farming themselves, and a happy state of friendly relations exists between them and their

In Denmark there are many freeholders or State tenants who own land for their lives, if not for a longer term, and here again the farms and holdings are small compared to our English division of land. This seems to point to the fact that until some of our very large landowners reduce their properties, which can be done so that it does not injure shooting, many groups of intensively cultivated holdings cannot be formed. If these farms, however small, were held upon long leases by educated men and women, well trained in up-to-date and scientific methods of cultivation, working together upon co-operative principles, our countryside would gain renewed vitality. By the aid of building societies, better cottages would be provided for the laborer, and the suggested improvements in rural education would enable his children to raise themselves to the ownership of land.

It is often distressing to find that those in authority and with influence appear to be more concerned with expansion abroad in our colonies than with lending encouragement to people settling on the land in England. Yet what a prospect for development there is in this island, where in some places the population is so densely crowded that health is injured, and in other districts there are stretches of uncultivated waste land, where a few dilapidated cottages alone show signs of

# Cadorna, "The Joffre of Italy"

From the New York Times.

N the old mansion at Pallanza, Sept. 4, 1850, was born the present Chief of the General Staff of the Army. His parents were Raffaele Cadorna and Countess Clementina Zoppi—two names cherished in the military history of Italy.

cherished in the military history of Italy. At the age of ten he entered the military college of Milan. After five years—on October 30, 1865, to be exact—he entered the military academy at Turin, whence he was graduated in 1868 at the head of his class, so that on his eighteenth birthday he was appointed Second Lieutenant to the General Staff. With this grade he entered the School of War. During his term there he served in both the infantry and the artillery.

He was then appointed to the staff of the division at Florence, which was commanded by his father, General Raffaele Cadorna, under whom he was serving as a lieutenant when the latter took command of the expedition against Rome.

In 1875 he was appointed Captain.
On December 9, 1883, he was appointed Major of the Sixty-second Regiment of Infantry, bringing hither an immense fund of theoretical tactical knowledge gained from a careful study of the wars of the past, for which now he sought practical application.

After three years Major Cadorna was recalled to the General Staff and attached to the Fifth Army Corps, then under the command of Count Pianell.

When not yet forty-two years of age he was placed in command of the Tenth Regiment of Bersaglieri and brought to it the strict application of the discipline and tactics of which he was master. This he did in such a way that, in spite of his severity, he won not only the affection but the genuine enthusiasm of his subordinates. Even now the old officers of the Tenth Bersaglieri remember him and rarely pass through the capital without leaving their greetings with him.

The reason is that Colonel Cadorna loved not only discipline but also exercised the most scrupulous impartiality.

In 1896 Colonel Cadorna left his regiment. In the preceding year he had been present at the grand manoeuvres of the Abruzzi, in which the corps to which he was attached gave proof of its ability, even in the mountainous country, and especially in its extreme mobility. Many will remember the feat of a couple of Bersaglieri regiments, the Fifth and the Tenth, which performed an impossible but well-conceived movement into the "enemy's" country in such a manner as almost to be a surprise.

Cadorna was next made Chief of Staff of the Army of Florence, under the command of Generals Morra di Lavriano, Heusch, and Baldissera. Even to-day the first remembers his former Chief of Staff, and when Cadorna was made a Senator General Morra di Lavriano hastened to be present when his friend first donned the toga.

When made Major General, Aug. 10, 1898, he wrote an excellent pamphlet on tactics for the officers of his brigade. The book soon became known to her Gen-

erals and was much sought after, for it was recognized as embracing the fundamental rules for infantry training. In its later editions this pamphlet is acknowledged as an authority, and when General Cadorna became Chief of the General Staff of the Army he had the satisfaction of seeing his little book, although written sixteen years before, universally regarded as the best work on the subject.

In January, 1905, he passed from the brigade at Pistoia to the division at Ancona, and in 1907 to the command of the division at Naples. He was in Naples when General Saletta retired from the post of Chief of the General Staff. Everybody believed that the position would go to Cadorna. We do not know why he was not selected, but surely he was very indifferent to the discussion which arose at the time, and continued silently to perform his duty in his usual way.

In 1910 he was appointed to the command of the army corps at Genoa, and the next year he was designated as the commander of a war army. He was then in Rome, and his first impulse was

to call upon General Pollio, the Chief of the General Staff, in order to thank him for his interest in having secured Cadorna his new honor. This fact may as well be mentioned, as these two Generals, so different in their attitude towards the game of war, nevertheless had a wholesome respect for each other, and both were honest men. It is not for us to make comparisons, but only to make known to the public the man who to-day has the fate of the Italian Army in his hands. As to the others and their predecessors, history will give to the work of each its due.

Strong in character, when he has deeply considered the solution of some prob-

lem, he finds it easy to defend his position, and it is then that he displays all the vivacity and efficacy of argumentative oratory, being greatly aided by a wonderful memory, which ignores all notes.

It is a well-known fact that on the subject of the defenses of Genoa the late Chief of Staff and General Cadorna entertained entirely different points of views. When the Defense Commission met, Signor Giolitti, who as Premier was, ex officio, President of the commission, and had not met Cadorna, was amazed when he heard him speak for several hours with a perfect command of dates and figures and with wonderful precision and clearness, so that the subject became clear even to the lay mind; and the commission approved Cadorna's plans.

Coupled with a keen and acute intelligence Cadorna possesses a strong and tenacious character, to such an extent as to make his preconceptions inevitable in their results, in spite of all difficulties and obstacles. When he was placed in command of the Blue Army in the mannoeuvres of 1911 his strategical position from the very beginning was not of the best, and the situation was, moreover, made worse by the tardy delivery of an order, which caused the early retreat of the force which was guarding the River Po.

Cadorna formed his plan and executed it with his usual energy, but the tardy advance of a division and the loss of some artillery caused his position to become still more critical. An imaginary Third Army Corps was supposed to aid him between Piacenza and Stradella. The general solution was a retreat for that part of the army which was already in contact with the Red Army to such a place where the imaginary Third Corps could concentrate, and then, having acquired superiority in numbers, it could again take the offensive.

But the existence of that Third Army Corps was not known to the public simply because it was imaginary; the retreat of all the forces appeared as a defeat for the Blue Army; public opinion, which is not aware of the fact that the retreat of an army is a very decliate operation, judged Cadorna as being beat-en by the "enemy." Instead, he looked upon the manoeuvres as a school and, without minding the erroneous interpre-tation of the public, he retreated. The order for retreat was issued at 10 p.m., to be begun at midnight. At 7 o'clock next morning the opposing army found that the Blue Army had vanished, and it was only after two hours that it was located. If the manoeuvres had continued the plan of General Cadorna to assume the offensive under better conditions would have been carried to a successful issue.

All this was not known to the public; of their ignorance Cadorna took no thought, and it was only after the insistence of a very devoted friend that he publicly explained the true state of affoirs

This characteristic of General Cadorna is a guarantee that, in actual warfare every movement will be carried out only for military purposes and utterly disregarding outside opinion, which is mainly caused by impatience.

### The American View

By Booth Tarkington in the Metropolitan Magazine.

USTRIA (to Servia): You scoundrel, get down on your knees and eat ten mouthfuls of dirt! Do it in one minute, or I'll shoot!

Russia (to Austria): I'll shoot if you do: (to Servia): Eat all the dirt you possibly can; do your best to keep him from shooting. I don't want to have to

England, France and Italy (to Austria): Please wait a minute; (to Germany): Austria is your brother; he does exactly what you tell him to do. Ask him to wait just a minute longer before he shoots. We can arrange this to satisfy Austria if you'll get him not to shoot.

Germany: No.

Servia (on his knees and swallowing): There! I've eaten nine mouthfuls, and I will eat the tenth if you'll give me just a few seconds for digestion.

Austria: No, your minute is up and I

shoot.

England and France (imploring Germany): Please stop him! You are the only one who can. Won't you say a word to stop him?

Germany: No.

Russia (beginning to load his old-fashioned shotgun): I hope you'll stop him. See here, Austria, can't we talk things over and see if there isn't a better way

Austria: Perhaps we could if-

Germany (interrupting): Russia, quit

loading that gun!

Russia: I can't while things are in this shape, but I will quit loading at once if Austria will promise not to shoot Servia.

Germany (interrupting): I love peace and I have done more than mortal may to preserve it. The sword is forced into my hands, evidently by God, and I defend myself. (Draws two well-oiled and loaded numn-guns of a magnificent new model and begins to shoot, while France and England run home to get their guns.)

Search as we might, we could find no true substitute for this dialogue. We have read and listened eagerly ves. anxiously and hopefully-to everything the Germans had to say; we wanted to see the case of their government in a happier light; but nothing altered the substance of the governmental conversation just given. We did not wish to see things that way, and when reluctantly, we found we could not help it, the Germans declared that we must have "personal motives;" attachment to our "mother country," England, and our love of British Gold! But our "personal motive"-what there was of it-was all for Germany. We were unblinded by the patriotic excitement that possessed every German; there was nothing to blind usand we saw that the German Government had forced this war.

That much is clear. It is so clear that it is not to be imagined that Dr. Dernburg (an informed statesman) could argue the question in private with another informed statesman of any country and remain of a serious countenance. It would be as if one grown man maintained to another that the stork really does bring the babies.

But there is, of course, a question behind this certainty: Was Germany right in forcing the war? We should answer "Yes!" if we could see that the life or the liberty of the German people had been thereby preserved from imminent destruction, war being the only means of preservation and all other means having been exerted to the utmost. But we know that there was no threat in the universe against the life or liberty of the German people. All that was threatened was the desire of the German Government for more power-that it to say, "expansion."

We know that the German Government (consisting of a man or a group of men) forced the war, and it is our best opinion that this man, or group of men, forced it because he, or they, wished for more power. Why did the German people permit all this killing to begin merely to serve such ambition? The Germans answer perfectly when they tell us so "The German army is the German nation!" That is, the German nation is the German army. An army conquers by its belief in its commander, and this nation-army does not-and cannot-question the wisdom or integrity of its captain. Mind and body, an army follows.

And thus, not willingly (we must continually emphasize this), we saw the cause of the war. We need go no deeper into it: there is always cause behind cause; we seek only the living responsibilities.

Then we watched Germany begin the war which we were forced to admit that she had made. That sentence is not quite accurate: we have never believed that Germany made the war; we believe that Germany is merely a loyal and unquestioning engine in the hands of a man, or a group of men. (We know that it is an enthusiastic engine, too, which does not change the case.) More accurately, then, we watched to see how this man. or this group of men, began the war.

They began it by stating officially that they found it useful to commit a crime, for which they would atone as soon as convenient. They announced this themselves: nobody had charged them with They spoke out in open meeting and proclaimed that what they were doing The person who placed was a crime. that definition upon the invasion of Belgium was the chief official of Germany, next to the Emperor. He said that Germany would commit this crime because Germany needed to commit it. That settles the invasion of Belgium for us. We take Germany's official word for it that

It settles the question forever for us, and it settles, also forever, all questions regarding what kind of men made this war. When they stated that the invasion was a crime, no one else had found time to call it a crime, and they, not yet being on the defensive, were a little apologetic about it. Afterward, when the rest of the world also called it a crime, the German officials said: "No. When we got to Brussels we found some papers that showed the Belgians were guilty. They were plotting to have the English help them in case we attacked Relgium -so it wasn't a crime after all!"

Suppose Belgium were "guilty," the German government ordered the invasion of Belgium believing and announcing that invasion to be a crime. That is enough; nothing can ever alter it. Is there is a lawyer on earth capable of saving a client who has declared his intention to commit a crime, does commit that crime, and then excuses himself on the ground that in cleaning up the house of the defunct, he has discovered that the latter had intended to commit a crime

against him!

We do not accept what the enemies of Germany say of Germany. We have been neutral. We look only at the "documents in the case," and at the facts—the facts as presented by Germany-and we listen to Germany, not to her enemies. Now, among the documents we find certain promises and agreements signed by Germany amid circumstances of pleasant solemnity at The Hague. One of them is a promise not to kill innocent and harmless people for the purpose of punishing other people. Well, in the course of the invasion of Belgium, and in France, the German commanders broke this promise. They prove this themselves. It does not need to be charged against them; they publicly proclaim the perjury. They hanged and shot harmless, peaceable, unarmed people wholesale, deliberately, and by order, because it was believed that these murders-or "executions"-might frighten other people who were unnaturally shooting at German soldiers.

We do not quite like this; it does not seem right to us, somehow. Even if these slaughters were not in violation of a promise, we should not wholly approve -here, in America. In fact, the grimly smiling, "Well, that's war!" does not satisfy us as an explanation of all such little matters, and it is with difficulty that we subjugate certain monstrous

suspicions that beset us.

We have learned that the Germans, as the war wore on, began to hate us. They wished us to change our laws in their favor and to the damage of the Allies, to prevent ammunition made in this country from being sold to the enemies of Germany. For us to make this discrimination now would be contrary to international understandings in effect before the war-agreements to which Germany herself was a party. To violate these in her favor, during the war, would be the reverse of neutral; it would be, in effect, to become the ally of Germany against the Allies. We do not want to become the ally of Germany. (Our hope has been to remain neutral.) But Germany began to hate us, naturally though unreasonably, because the Allies were able to buy our ammunition. Of course



we would sell it to Germany, but her enemies prevent her from coming to get it. That is her quarrel with us.

No doubt this was the cause of the somewhat general pleasure reported from Germany upon receipt of the news that more than a hundred Americans had been killed by a German submarine. There was a disposition, here and there, even in this country, to regard these slaughtered ladies and gentlemen as foolhardy. On the contrary, a little investigation will prove that they were people of unusual intelligence — but trustful! They knew that their trunks might be in danger, but their lives were safe, because there was a law of nations protecting their lives.

Their lives had to be saved before the ship could be sunk. It would not do, of course, to trust to this law on the Congo when the tribes were up, but in "civilization" this law was law. It happened, however, that a man named Von Tirpitz had a new weapon, and he had declared months before that he would use it, contrary to any law whatsoever, if Germany became desperate. Now, about this desperation of Germany's, Senator Beveridge has reported authoritatively (after talking with the Emperor, with Von Hindenburg and with Von Tirpitiz himself) that none exists, and that there is no more "starvation" in Germany than in our own country. As the editor of Collier's has pointed out, this leaves nothing of the Tirpitzian defence-(for breaking the law) that the torpedoings are reprisals for German sufferings caused by England's blockade of German ports.

And again, in the case of the Lusitania, the retort, "Well, that's war!" did not appear to be an answer, and once more we had to contend, within ourselves, against those monstrous suspicions that rose and rose anew to beset us. They were not quelled by the New Ethics. As we understand matters, murder is killing a human being contrary to law. The German submarine killed a number of babies. Babies are human beings. The law was that the ship might be sunk, but first the babies must be saved. The submarine murdered the babies.

The New Ethics is ready for this, answering twice. Here are the two new axioms:

1. Murder is proper and may be praiseworthy if the murdered persons have been warned that they will be murdered unless they order their affairs to suit the intending murderer.

2. It is praiseworthy to break the law and your own agreements (murdering babies included in this) "in reprisal," or if such action is likely to result to your own and your friends' advantage.

own and your friends' advantage.

We do not like the New Ethics. We will do a great deal before we consent to these modern doctrines. Killing the babies on the Lusitania did not save the lives of any babies in Germany. Nobody has to think that over to know it, but the idiotic claim was made. If killing the babies on the Lusitania had been useful to the babies in Germany, we still should not like the idea. If killing one baby on the Lusitania actually and im-

possibly saved the lives of six other babies—Germany, French, or American—we still should not like the idea. We don't like killing babies for any reason at all.

We have heard a sufficient babble of talk, mystic and yet flavored with a kind of hideous unction, to the vague effect that war — war of itself—produces a "great spiritual uplift." This seems to us to smell of perversion, advocacy of nations practising flagellation; and we have not perceived the "uplift." We have only been able to see that war produces corpses. If there be "uplift" beyond our ken, in the war-making nations, we see that these corpses do not share in it, and that seems unfair.

We hate war—but we have discovered that all the world is not of our way of thinking. This world is not the world we thought it was. We have learned that we may have to defend not only our rights under the law, but the very life of what we believe to be civilization. Alas! We must be equipped for that defense. But, as we arm, we must be careful of our patriotism, as others, unhappily, have not been careful of theirs.

For patriotism is not the belief that your country is right; patriotism is the passion to keep your country in the

A country "in the right" is thinking and acting not more for its own good than for that of all humanity.

### Has Kitchener Four Million Men?

By J. Herbert Duckworth in the American Magazine.

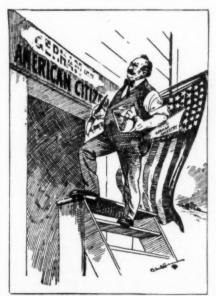
H OW Kitchener's Army was secretly increased from one million to four million men right under the very noses of the ubiquitous German spies is one of the most amazing stories of the war.

The feat of clothing, arming and training this mighty host, and of then smuggling it out of a supposedly submarine-blockaded island to France, has no parallel in history. As an exhibition of high strategy alone it surpasses the finest performances in the field of either General Joffre or General von Hindenburg.

eral Joffre or General von Hindenburg.

It completely deceived the German General Staff as to England's military strength, and confounded the Teutonic theorists who had always maintained that it was impossible to make a soldier in less than three years.

This grim joke on the Kaiser was concocted by Lord Kitchener himself. He commandeered the services of the press to assist him to carry out the great bluff, and there can be no harm now in telling how it was done.



Just Plain American.

-Clubb, in Rochester Herald.

When the British Secretary of State for War first conceived the idea of putting into the field four million men, he realized that it would be a grave strategic blunder to allow the enemy to know what was really afoot. Rather, the game should be to call for a million men, and then press-agent the world with stories lamenting the fact that, at last, the British Empire was about to crumble up because the men of England had not the pluck to defend it. All the German stories that the modern Englishman had become effete and anaemic were, indeed, too true!

The scheme worked out admirably. Recruiting was phenomenally brisk from the first. Yet the Germans eagerly swallowed the skillfully phrased yarns that were published broadcast, that told how only conscription would save the British from utter disaster.

While the cartoonists and funny verse writers of the rest of the world were holding up to ridicule the sport-loving Englishman, who was supposed to be refusing to shoulder a gun in defence of his hearth and home, Great Britain was rapidly and thoroughly building up her own big "Steam Roller."

The campaign of silence was conducted on strictly scientific lines. The newspaper editors were first warned that any indiscretion would mean a court-martial, under the Defense of the Realm Act, on charges of having "spread reports likely to interfere with the success of His Majesty's Forces." They were instructed to publish only the recruiting returns sent out by the War Office. Independent census-taking was strictly forbidden. All articles on the new army, and even pictures of soldiers, had first to be submitted to the censor. A permit was required even to own a camera.

One London editor refused to "stay put." He published a picture of some soldiers without the permission of the censor. Lord Kitchener sent for the offender.

"A second indiscretion," he explained, "will mean a court-martial and jail."

"On what charges?" stuttered the astonished editor. "Never mind," answered Lord Kitchener; "we will clap you into prison first, and find the charges after the war is over."

The English have the reputation of having "muddled through" most of their wars. They are muddling through this one, but for once there has been method in their muddling. Tricks and subter-fuges, cunning and innumerable, were adopted in order to hoodwink the enemy as to size and disposition of the new army. Battalions of the same regiment were trained in different parts of the country. Instead of creating new corps, old ones were increased to colossal proportions. The Manchester Regiment, for instance, grew from four to thirty battalions-to thirty-six thousand men. Of course it was obvious to the most casual observer that Great Britain was getting together a tremendous army. But who could say whether it numbered two million or four million men?

Nothing was ever said about the five hundred thousand very efficient Territorials. And yet these men virtually belonged to Kitchener's Army. Men who enlisted in the Territorial forces after the declaration of war undertook the same obligations as the men in the regular army. The old members, recruited for home defence only, were easily brought into line. They were paraded before their colonels, who would bawl

"Any man who doesn't want to go into the trenches please step one pace to the front."

When it came to moving the new troops to France extraordinary precautions were taken to mislead the spies. The regiments were not all transported from Southampton to Boulogne or Havre. Instead they were shipped from what were really out-of-the-way and inconvenient ports—Bristol, Avonmouth, Cardiff, Swansea and Barrow, for example—to French ports as far from the firing line as St. Malo, Brest, and even Bordeaux on the west coast and Marseilles on the Mediterranean.

Troop trains were invariably moved at night with drawn blinds. Oftentimes they were run half way around the country before being sneaked alongside a transport. Not even the officers were aware of their ultimate destination—whether it was to be France, Egypt, India, or the Dardanelles.

The engine drivers were changed every twenty miles or so, and the captains of the troop ships received their final instructions by wireless after they had put to sea.

Last spring, when the movement of Kitchener's Army was in full swing I visited Ryde in the Isle of Wight. One day a fleet of at least thirty transports collected in the Solent. Nobody knew where they had come from. At dusk a score of forty-knot toppedo boat destroyers, the escort, put in an appearance. When night fell nothing could be seen but the searchlights sweeping the entrance to Portsmouth Harbor, on the mainland, for enemy periscopes. In the

morning transports and destroyers had gone.

What was the secret of Lord Kitchener's success in so easily persuading four million men voluntarily to enlist? It was advertising. A very few days after England had decided to enter the conflict millions of posters calling for volunteers to enlist for "the period of the war only" were plastered up. The whole country from John o'Groat's to Land's End looked like one huge billboard. It was the biggest and most thorough advertising campaign ever conceived and successfully carried out.

On one day alone, August 20th, ninetyseven thousand recruits took the "King" Shilling." And at the very height of this boom the newspapers, at the instigation of the War Office, commenced to publishthe stories about the supposed failure to get men. Young Britons, it was said, preferred cricket, golf, tennis, and afternoon tea to fighting for their country. It was whispered at Westminster that conscription was being considered. Poor Old England's downfall was at hand! This "disgraceful state of affairs" was not passed unnoticed by the correspondents of neutral countries, and their despatches telling of "England's Shame" were re-

As a matter of fact, the early enlistments were so heavy that before the end of September Fleet Street was tipped off by Whitehall to stop "imploring" for more men. They were coming in too fast for the authorities to deal with them. Down at Aldershot and the other garrison towns the men were sleeping ten instead of four in a tent, and there was not sufficient food on hand to feed them.

published in Germany and gloated over.

In less than two months the United Kingdom was one vast camp. Out-of-the-way villages in the mountains of North Wales, or among the lakes of the Scottish Highlands; the big industrial cities of Lancashire, Yorkshire, and the Black Country; the coast resorts—each had one hundred or one hundred thousand men billeted upon its inhabitants.

Stretching from Canterbury and Chatham across Kent, Surrey and Sussex into Hampshire, I motored through a strip of territory, three or four miles wide and over a hundred miles long, that was almost one continuous encampment. This encampment included the military commands of Aldershot and Salisbury. It was the same wherever I went.

The cities were the first to respond to the call to arms. First of all came the sturdy backbone of the country—the miners from the Lancashire pits, factory hands from the Yorkshire mills and the ironworkers from Birmingham and Sheffield. The cavalry was recruited almost exclusively from the Cockneys.

No, Englishmen did not refuse to give up their sports and pleasures in the hour of their country's need. And they were not bullied into serving. The playing fields of England were absolutely deserted last September, and are now knee-deep with weeds and long grass. I have seen them, as I have also seen regiment after

regiment tramping over the world-famous golf links.

Kipling's "muddied oafs" formed a Football Battalion of their own, cricketers, golfers, and other athletes went into the Sportsmen's Battalion. Eighty percent. of the undergraduates of Oxford and Cambridge, and all the members of the different athletic teams, enlisted either in the ranks or applied for commissions. The "Knuts," the Piccadilly dude, the "young bloods," who made the night-dancing clubs possible in London, are now all doing their "little bit." Night life in London ceased when England went to war.

Gentlemen chauffeurs, taxicab and motor-bus drivers joined the Army Service Corps; wireless operators, telegraphists, engineers and architects flocked to the Royal Engineers; a thousand civilian aviators enlisted in the Royal Flying Corps; the lawyer, the shop clerk, the broker, the hod-carrier, the banker and the van boy joined any old regiment.

I was in England, on and off, during the first seven months of the war, and I have seen the men of Kitchener's Army at all stages of training. I don't know what sort of soldiers they will prove to be, but I do know that every man will be sent into battle physically perfect. Every soldier has been trained as though he were a prizefighter preparing for the world's championship. Their preparation has not only consisted of drill and musketry, but they have been given every conceivable kind of gymnastics.

It used to hurt those who all the time were in the secret to read that France was complaining that she had been left in the lurch by her great ally. But France, and the rest of the world, now understands that John Bull was only bluffing when he pretended that he could not get enough men to accept the War Lord's challenge.

#### Rifle With Brilliant Light

Intended for point-blank firing at close range, a flash-light equipment has been devised for high-power rifles which simplifies the aiming of a weapon when it is used for shooting wild beasts after dark. Unlike other lighting apparatus heretofore introduced for night hunting, the beam of light has the shape of an inverted letter "T." This character is brilliantly emblazoned upon whatever object the shaft of light strikes, as, for instance, the shoulder of a lioness. The hunter in this way is able to point his rifle almost as one would the nozzle of a hose, for upon firing, his bullet will strike the point indicated by the character. Just enough light is dif-fused outside of the plane of the "T" shaft to dimly illuminate a small field and show the outline of an animal. It is said that use of the device in Australia has shown that a wild beast appears momentarily paralyzed by fear when blinded by the

# Good Homes Make Good Workers

By Ida M. Tarbell in the American Magazine.

HERE is a growing recognition in the industrial world of the determining effect that the life outside of the shop has on the life within. Many men of intelligence and understanding declare that our hopes of a better industrial world cannot be realized if that life outside is unhappy, hopeless and meager. One of our greatest safety experts says that safety is impossible if a man is poorly housed and fed. An experimenting and successful manufacturer employing hundreds of girls declares that unhappy homes make unstable payrolls. Another tells us that without healthy amusement workers can never be depended upon for efficiency. Competition itself is forcing employers to consider the outside life of their employees. The first and most important thing they must consider is the house the man lives in.

A good working man wants a home, wants it more, on the whole, than any other thing. He wants, if possible, to own his home. Wherever you find stable industries in this country you find the wage earner buying a bit of land and building a house. It is he who pushes the cities out in long lines of tiny cottages. It is he who opens "additions" suburbs. It is he who supports the extensions of car lines, water, gas and electric mains. Take the street car in various directions from a growing place and note the miles and miles of gay bungalows and trim houses. It is the man on wages who made the building of them necessary.

In Grand Rapids, Michigan, an industrial town of some 112,000 inhabitants, there were, twelve months ago when these figures were obtained, 24,407 residences. The greatest number of these were workingmen's houses, street upon street of them. Building and loan associations and the banks which

make a specialty of loaning money on workingmen's homes say that 90 per cent. of the married laborers in the town, skilled and unskilled, own houses. The average cost of these is about \$2,000. They are, as a rule, paid for in ten years. As the average wage is only a little over two dollars a day it demands thrift to own these homes. It means plain food and clothing, inexpensive amusements. But happily in Grand Rapids it does not mean the sacrifice of education, books, or pleasant out-of-door life, as these are all provided by the city.

Nine years ago a superintendent in the Fairbanks Manufacturing Company of Beloit, Wisconsin, found on his hands a piece of condemned land in a new quarter of the town, but convenient to the factory. He decided to try building houses there for the married men in the plant. In seven years he built one hundred and thirty, all of which were quickly taken and on no one of which has he ever lost a cent. The terms were easy. The first

payment was frequently as low as \$25. went through an attractive, well-built house with a good furnace, gas, water, electricity, and land enough for a garden, which the owner was buying for \$20 a month. The rent of such a place was about \$14 in Beloit. There were plenty of men, even on \$2 a day, who were willing to take the burden of such a place on their shoulders. What did they get? What do any of us get from a place "of our own?" A sense of security and privacy and independence—a place to tinker and play with, a nest if you please. We get, too, the sense of property. The house earned has been in many a family's life the beginning of its independence.

Happy is the employer who can shift to the shoulders of landlords, of building associations, of banks and of speculators the responsibility for the kind of a home his employee lives in. He can only do



Canada "making good" as the granary of the Empire.

this when he operates within or near a town. Let him go into remote and unsettled districts and immediately town building is forced upon him. If he does it stingily, half-heartedly, he is sure to reap as much trouble as he does from defective machinery, if he does not ruin utterly his chance of success. It is in the case of enterprises which are of uncertain or temporary duration that the difficulties are greatest.

If a company opens a mine in the mountains, scores of miles from a town, it must build a village, and it must own it, for the simple reason that mines are not necessarily durable properties. They "run out." and when they run out the town is abandoned, its houses are as useless as the shafts and the galleries. Under these circumstances no miner can be expected, or would he desire, to own his home; no more would outside builders venture investment.

The company is compelled to be its own landlord. It is frequently compelled to

be its own town council, schoolmaster, policeman, justice of the peace. body of the working people will be non-English-speaking and of many nationalities, few of them will understand American standards of living, even less will they understand our social and political customs. The management will not understand the miners. Nine times out of ten it will tell you-and believe-that they prefer to live like swine, and that there is no sense in attempting to provide anything convenient, attractive or orderly for them. But is it true? If this foreign miner and his family had a chance to live decently would they do it? Yes! Nineteen times out of twenty they would. If anyone doubts it, let him look at results of the efforts which have been making for several years to redeem the towns of the Frick Coke Company in the famous Connellsville district of western Pennsylvania.

I doubt if the villages of the Frick Coke Company were ever quite as desolate and unsanitary as many that are still to be seen near Pittsburgh, but they

certainly were unfit for men and women to live in, and a few years ago the company decided that they must be redeemed. The leader in this undertaking was the president of the company, the late Thomas Lynch, the man who twenty years ago introduced the "Safety First" crusade into his mines. The order that came to the mine superintendents was, briefly: Clean up the towns; grade the streets and put in cement curbs and walks; fence the yards and cover them with sufficient soil to enable the residents to raise flowers and vegetables; provide new and approved vaults; put water in the kitchens; add porches; paint the houses, keep the alleys as clear as the streets, and teach and encourage the people both to keep their places clean and to make gardens. This order applied to twenty settlements, four thousand double houses in all.

That was five years ago. In the fall of 1913 I spent three days driving from settlement to settlement to see how nearly the order had been carried out and what response the people had made. I have never had a more conclusive demonstration of the fact that no living conditions can be so bad that they cannot be redeemed, and that no fallacy is more complete than the oft-quoted one that these people prefer to live like swine.

In those three days I visited a score of settlements, and in all of them the program had been applied to conditions fully as bad as those I have described. The general decency of things in contrast to the former awful indecency first struck one—the decency, the order, and the cleanliness. I doubt if there is an established town in the United States that can show as clean alleys as dozens through which I drove.

The impression of those towns last to die in my mind will be the miles and miles of trim white fences and outhouses. It was interesting to see how contagious the painting was. The company paints

everything once a year, but I found several ambitious women and one or two men who were putting fresh coats on the front porch and on the fence, something to make them a little finer than their neighbors.

When the company began its work I doubt if there was a bushel of soil in which a seed could sprout in all the eight thousand dooryards. Thousands upon thousands of loads of dirt, manure, and lime were carted, and the results awaited. There were those who sneered at the idea that these men and women who, some of them for twenty years, had lived on barren ash piles, would make gardens. But they didn't know their world. They fell to gardening as if it had been their yearly habit. In 1912 out of some seven thousand families in the different settlements 5.149 had gardens of some kind; in 1913, 6,293; in 1914, 6,923.

And they were serious gardens.

To encourage them, the company offers in each settlement a first, second and third prize. The judges are chosen from neighboring farmers. In 1913 at one settlement there were nine plots so good that the judges could not decide between them. They spent three days over the work and were coming a fourth when Mr. Lynch heard of it. It was an impo-

sition, he said, to allow them to give so much time; he would give nine prizes. And he did. It was October when I visited the settlement, and they were still discussing the contest. I was taken from yard to yard to see what was left of the glory, and in the "best room" of the cottages was shown, often gorgeously framed, the certificates each prize-winner had received.

There is much more than glory comes from the garden. In 1913 I saw many cellars packed with enough potatoes, beets, onions, carrots and other vegetables, to carry the family through the winter, and at one place I saw twenty-five hundred heads of cabbage sold by a miner to the company store. It is estimated that in 1914 the vegetable gardens yielded crops worth nearly \$143,000. It was a veritable godsend in the dull times.

The redeeming of the towns has cost money. Upward of a million dollars has been spent on it: more will be spent, for the plans are steadily enlarging. At one settlement a commodious clubhouse with outside swimming pool and playgrounds for the children has been provided. Others are to be built. The company has put many thousands of dollars into ball grounds. The housekeeping centre has

been introduced at one place.

# More and Cheaper Gasoline

By Joseph E. Murphy in Popular Mechanics.

ORE gasoline is being used in the world to-day than ever before —yet the price of this fuel, so essential in this era of the internal-combustion engine, is lower than it has been in many years.

The present European war has been termed the gasoline war, and justly so, for if deprived of this fuel the armies engaged in the great conflict would be compelled to suspend operations. For transporting the field and siege guns and for propelling the thousands of motor cars used in the transportation of troops, ammunition, and supplies on the scale required in a war of such magnitude, gasoline is a necessity, and without it the operation of Zeppelins and aeroplanes would

be an impossibility.

But in spite of the tremendous demand made on the oil supply by reason of the war, gasoline has been getting cheaper. This situation is the result of the development of improved methods of refining by which a greatly increased supply of gasoline can be obtained from a given quantity of crude oil. During the past year the tank-wagon price of gasoline has fallen in the large centres, apparently from this cause, from 16 cents to 9½ cents a gallon. There is little doubt that the price will eventually go still lower with the development of the new process just discovered by Doctor Rittman, chemical engineer of the U.S. Bureau of Mines, which was announced in the May, 1915 issue of this magazine. The improved processes now in use are held as a monopoly by one group of refiners. The new process is to free to all refiners who will submit to certain government regulations. With it, it will be possible to extract three times as much gasoline as can be extracted by the process of distillation.

Increased production of gasoline is not all that will be accomplished by the new process. It provides a means for obtaining from crude oil the two hydrocarbons toluol and benzol, heretofore obtained from coal tar and produced almost exclusively by German and British manufacturers. Toluol and benzol are of vital importance both in peace and war. They form the "mother" substances from which aniline dyes are made and are at the same time indispensable ingredients of the high explosives used in modern war-

To understand just what is done by the new process it is first necessary to know of some of the qualities of that group of substances known as hydrocarbons. A hydrocarbon, as its name indicates, is a combination of the chemical elements hydrogen and carbon. In the combination there is usually nitrogen, oxygen, sulphur, or other chemical elements in small quantities, which are removed in the process of refining. The range of substances produced by different combinations of these two elements is probably the widest to be found in the whole range of natural products. There are about 200 hydrocarbon products, many of them indespensable adjuncts of our everyday life. Crude oil, or petroleum, which is the source from which most of these products are derived, is simply a mixture of many hydrocarbons which may be separated from each other without chemical action by the process of distillation. Gasoline, illuminating oil, and lubricating oil, for example, are all present in crude oil, being mixed together much as different kinds of grain might be mixed. There are other products, however, that are less obviously present in crude oil, and to produce these it is necessary to resort to chemical action, which consists in breaking up some of the hydrocarbons and rearranging the atoms in molecules of a different kind. This is what is done when oils are 'cracked," a process that has been used heretofore mainly for breaking up the heavier oils and forming their components into gasoline molecules. It is one of the peculiarities of hydrocarbons that this breaking up and rearranging can be done repeatedly and to practically an unlimited extent.

Distillation, the process ordinarily used in refining, is made possible through the fact that the different hydrocarbons vaporize at different temperatures. The still is simply a tank equipped with a heating plant for boiling the crude oil. Connected with the top of the tank is a pipe leading to a condenser where the gases produced by the boiling are cooled and reconverted into a liquid. Crude oil contains several ingredients that become gases at from 32 degrees to 62 degrees F., and these pass off to the condenser at the beginning of the process. The real business of distillation, however, begins when the temperature of the oil reaches 140 degrees F. From this temperature to 150 degrees F. the vapor that passes over to the condenser is benzine. As the temperature goes still higher there are produced, in the order given, the lighter gasolines, the heavier gasolines, fuel distillates, kerosene, heavy oils, lubricating oils and paraffin. The residue remaining in the still after the boiling is completed may be almost pure coke or asphalt, depending on the nature of the crude oil, or it may be a mixture of cylinder and fuel oil. Now it has been found that additional quantities of the lighter distillates, such as gasoline, may be produced from this residue by "cracking," which consists essentially in subjecting the oils to extremely high temperature and heavy

The separation of the condensed distillates is simple, the apparatus consisting of a series of tanks so connected with the condenser that the liquids can be turned into any one of the tanks as desired. While the benzine is being vaporized all the liquid goes into a tank containing only benzine. The instant the temperature reaches the point where the gasoline begins to come through, a valve is turned and all the gasoline is discharged into a second tank, and the same process is followed with each of the other distillates in turn. Each distillate may contain several products and may have to be subdivided by a second distillation. This is only a general outline of the process, the actual work of distillation varying to suit the methods of the individual refiner and the requirements of the particular crude oil being treated.

The biggest feature of the new process is that practically all the crude oil can be converted into any hydrocarbon desired, so that it provides a means for "cracking" oils on such a scale as has not been thought possible heretofore. Full

details of the process have not been made public, but it is reported that the kind of hydrocarbon produced is governed solely by the degree of heat and pressure applied. With a temperature of 932 degrees F., for example, the product obtained is gasoline. If the temperature is raised to about 1,112 degrees F., benzine, toluene, and xylol, with small quantities of methane, creosote oil, and pitch, are obtained. The apparatus is simple and apparently does nothing more than vaporize the crude oil and subject the vapor to the required temperature and pressure. It consists of a vertical steel cylinder closed at top and bottom and connected at the bottom with a condenser. Near the top are several layers of steel balls that fill the space between the walls of the cylinder. These are kept at the right tem-

perature for vaporizing the crude oil. The oil is admitted through a pipe at the top of the cylinder and drops on the hot steel balls. As it passes the balls the oil is converted into a vapor which is forced to the bottom of the cylinder by the pressure of the new vapor constantly forming. At the bottom of the cylinder the vapor is subjected to the heat and pressure necessary for transforming it into the required product. The heat is supplied electrically by means of resistance coils. The gas formed by the new hydrocarbon molecules is then passed through the condenser and converted into a liquid. This process has already proved successful in the laboratory and is to be immediately subjected to test and development under conditions of commercial manufacture.

## The Machine that Thinks

From the Technical World Magazine.

IL oozes slowly in thick, viscous streams from the great lathes, as as they turn slowly but irresistibly in their relentless power; overhead the smooth, worn belts speed briskly and slap at the ceiling. The hum of a thousand machines fills the air; the confusion of whirling arms and belts and cams bewilders the eye.

The great factory is jammed with equipment. In fact, so close are the machines to each other, that there is barely room for a man to thread his way among them. There is no need for room, because on the entire floor, in all that maze of flying steel, not one man has a place. It is the strangest factory on earthfloor after floor of complicated machinery, without a man to guide it. Magnets are attached to the controls of each, and in front of some of them are curious rows of glass bulls'-eyes; and that is all.

A maze of wires, bound together into four cables, each thicker than a hogshead, leads into a seven-story tower at one corner of the plant. The entire maze of machinery is controlled from this tower. But more marvelous than the factory, even the tower is not filled with operators, each with keys and switches in front of him with which he controls some part of the machinery. Instead, it looks like a huge telephone exchange; for every floor is filled with neat rows of complicated mechanism, with parts that grind slowly and steadily, others that shoot into place with quick snaps that punctuate the purr of the mechanism like rifle shots, and above all is the insistent swish of rushing water, and the flash of opening and closing electric switches. This huge maze of machinery in itself is running the entire factory, taking in the raw material, making it up, casting out defective pieces, packing, sorting, and storing the finished goods, without the intervention of a single human being.

As a matter of fact, no such factory exists. It is a mere dream of the scientist; but it is a dream that now may actually be realized. Man may now be able to construct just such a mechanical

brain as that installed in the imaginary tower. These are all possible, as the logical development from a single extraordinary invention made by a St. Louis engineer—S. Bent Russell by name.

Jacques Futrelle, who went down with the Titanic, created a "Thinking Machine"-a semi-psychic, semi-human imaginary detective with a machine-like brain in a long-faced skull. Robert Houdin, the famous French necromancer, devised an automaton in the form of a man that would sit at a table and answer, by writing or drawing, any question put to Vaucanson's artificial duck, invented in 1709, "stood on its legs, moved its head to the right or left, drank, dabbled its bill in the water, quacked like a living duck, put out its head to take up seed, swallowed the latter, and would lay an egg for the edification of the specta-" according to a court chronicle of the time.

But none of these marvelous devices even approaches that of Russell's. Any-



The Traffic Cop

one could see that the machines were run by clockwork; and not even the most fanciful writer had dared to dream of a machine that could actually think. And yet that is just what Russell's machine does.

It is impossible in a few words to more than indicate how the thinking machine works. But in a general way it may be said that it contains an ingenious mechanism whereby it receives mechanical impulses transmitted by electricity from such devices as selenium cells and tuning forks that correspond to human eyes and ears, and sends them on to another machine that sets up motions such as those the brain causes in muscles. The first machine is so devised that the oftener it gets a certain impulse, the stronger impression it sends on to the second machine. Thi scorresponds to the way a man learns to recognize fine distinctions in musical chords, or shades of color, when he has received the impressions of sound or light often enough to learn the little differences.

The one big shortcoming of Russell's machine is that the machine corresponds to but one of the millions of nerve cells in the brain. Russell's thinking machine can take care of any one simple nervous reaction; but millions of the devices would have to be hooked together, before they could "think out" so complex a matter as a decision, sav. to take a trip to the expositions in California. But when cells are provided, and when with the aid of psychologists, neurologists, and physiologists, they are connected together properly, probably the resulting machine will be able to perform such mental feats.

The possibilities of such a device that occur to the imagination are enormous. If some foundation or some philanthropic multi-millionaire should provide funds and a huge factory building (which a staff of scientists could fill with properly connected cells) the building would become a real brain, except that it would be made of metal instead of animal nervous tissue. Even a few hundred cells could be connected to a switchboard, so that they could be combined differently; then, various "organs" could be attached in front, and the machine would handle simple problems of different sorts.

For instance, a plate bearing, say, twenty selenium cells, each covered by a glass of different color, the colors ranging through the spectrum from infra-red to ultra-violet, might be slipped onto the "sense rack," just as a lens is fitted to a camera, another plate containing the connections laid on the "connecting table," like a stove lid is fitted into its proper hole, and an indicating device be hooked onto the "motor rack." This indicating device would show which cells were receiving light.

If now, a colored light were turned on, the colors would filter through and actuate the corresponding selenium cells. The cells would send their messages to the "brain," and the indicator would at once show what colors the "eye" had seen. Constant exposure to red would train the machine so that it would recognize the

presence of red, even when the faintest shade was present, or it could be made to recognize harmonious combinations,

or anything else desired.

In the world of mechanical devices, the machine could either be trusted with actual work, or could be used as a check upon human workmen. For instance. one of these machines might be installed on board a boat which travels over practically the same course every day. machine would form the habit of responding to every turn in the boat's course, and, working in its own quiet way, it would give no indication so long as the pilot at the steering wheel kept to his habitual course. But if for any reason, he deviated from the normal path, the remembering machine, disturbed in its regular habits, would at once give the alarm by blowing a whistle. After it should become sufficiently trained, it might be intrusted with the steering by itself.

Again, the thinking machine might be put to a very practical application, in testing automobile motors. At the present time, in order to tell whether the mechanism of the motor is running precisely as it should, the investigator must make use of the stethoscope, similar to the instrument employed by the physician in the examination of a patient's heart or lungs. When it had been taught to follow the impulses that would be given by its being connected with a perfect running motor, with an auto horn, or with any other device that would make a noise, the remembering machine, with proper auxiliary equipment, would at once raise a vigorous protest when it was connected with a motor that varied in the slightest from the smooth-running mechanism to which it had been accustomed. It is an enormous step from these uses to the complex operation of running a factory; but man's past achievements would not indicate this advance as being by any means impossible.

Smoothness and lessened vibration, the goal of every designer, have stepped up a notch with the counterbalanced crank-shaft which one or two manufacturers have adopted. A small weight is attached to the short arms of the crank-shaft so that the centre of gravity of the whole will be nearer the middle and vibration will be lessened.

Another maker has adopted a wooden frame to lighten his car. The lighter the car, the less gasoline is needed to drive it, and the greater the mileage that is gained from the tires; so the wooden frame, brand new in 1915 on big cars, may have a prominent future, if this small beginning proves successful.

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But the real bulk of the innovations brought forth for this year consists of those refinements which are tending more and more to make the automobile the universal means for pleasure travelling. There are a thousand little improvements that make for lower gasoline consumption, lower cost, higher efficiency, a greater amount of comfort; and with these changes, travelling by automobile bids fair to become as luxurious as flying across the country in the parlor car of our gilded limited trains.

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The scheme for the feed is simplicity itself. A small tank on the forward side of the dash has two compartments. The lower feeds the gas to the carburetor by gravity; the upper compartment is connected to the fuel tank at the rear and also to the intake manifold. The latter produces a suction which creates a slight vacuum in the upper chamber of the tank. This draws gasoline from the fuel tank, thus filling the upper compartment, and from there the fuel flows by gravity into the lower, and in turn to the engine. The entire operation is automatic, and it eliminates all feed problems that have perplexed designers and drivers in the past.

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long journey.

The present year also has put the magnetic car on the market. This machine is the car of a thousand speeds, and is one in which there is no physical connection between the engine and the propeller shaft. To the driver the difference is amazing, and the control, with the lack of gear shifting, is marvelous. As to practicability—the United States Government has adopted the same type of transmission for one of our newest battleships.

Mechanically this new departure in cars is different from the standard motor car in but one thing—transmission. The device is composed of two electrical units, one acting as a dynamo, one as a motor. The magnetic field of the dynamo is attached to the crank-shaft of the engine and acts as a flywheel. The armature is mounted on the transmission shaft, hence both parts can revolve. The armature of the second unit is attached to the shaft also, but the magnetic field is stationary.

When the driver wishes to start, he turns a current from a storage battery into the field mounted on the crank-shaft. This starts the gasoline engine. The lever on the steering column then is moved from "Cranking" to "Neutral", the battery is automatically cut out, and

the gas engine runs alone, while the car stands still. When the lever is moved to "First", the first unit becomes a dynamo, generating power which it sends to the second. The second then acts as a motor spinning the transmission shaft, and the car goes under electric power. At the same time, however, the rotating field of the first unit drags its armature after it, but at a slower pace, and at the same time, generates power which actuates the motor unit. Since the armature of the dynamo unit is attached to the propeller shaft, the power of the drag is also communicated to the wheels.

The faster the engine goes, and the more the field current of the first unit is shunted by pushing the lever on the steering wheel into further positions, the greater the magnetic drag in the first unit. Thus at seventh speed the drag is so great there is practically no slippage; hence no current goes to the second unit, and the power is all transmitted by means of the drag—that is, the power of the motor is transmitted directly to the wheels.

Thus this year witnesses a welter of conflicting engineering tendencies, playing across the backgrounds of steady progress in perfecting the little details that make for convenience, looks, and comfort.

# The Ambitions of Japan

By Samuel G. Bluthe in the Saturday Evening Post.

HILE the white men of Europe are destroying themselves and disintegrating their territory, the yellow men of Japan are planning to extend their influence, increase their power, and consolidate their fellows of blood and race and color.

That, in a sentence, is the explanation in broad terms of the demands made on China by Japan on January eighteenth last, and then brought to the conclusion of their first phase by the refusal of

China to accede to the stipulations which are the crux of the whole matter, the vital points in the comprehensive scheme of Japan to assume a virtual protectorate over China, and mold China into such an object of offence or defence as Japan's imperialistic desires may dictate.

Certain propositions are too clear to admit of any dispute. The first and most important one is that, so far as Japan is concerned, she has seized this time, when the European Powers are engaged in a hand-to-hand struggle for existence, to begin the work for which she thinks herself the anointed Power—the consolidation of the yellow races. Who knows what grand ideas the Japanese may have? Fears of this program have been outlined many times in Western discussions and predictions concerning the Yellow Peril. The Japanese do not call it that, naturally. Several of the

leading Japanese statesmen, including Count Okuma, explained Japan's position to me—for publication in the United States, of course—as that of mediator between the West and the East. It is more than that. Japan does not desire to be mediator between the West and the East. Japan wants to be the East.

The first step consists in the acquirement of the power of directing China. The demands made on China by Japan were the overture for that ambitious pro-



How dare he violate solemn obligations.

-Carter in New York Sun.

gramme. The time for presenting them was opportune. Great Britain, Germany, Russia, the three Powers most vitally concerned in the fate of China, were at Moreover, Yuan Shi Kai, the present President of China, was making such progress with the nationalization of China, and with the organization of that vast, inchoate mass of territory and people into a tangible something and the arousing of a sense of patriotism, that Japan saw clearly that, given a few more years, the Chinese would have a real government and the affair would be far more difficult. Hence, this was the time. Europe, Japan thought, would not or could not interfere, and China was not yet in a position to make an effectual protest. So far as the United States was concerned, Japan held to the view that the United States would not go to war with Japan over the integrity of China, and it is quite likely that Japan held the right idea. The Japanese have no very high opinion of the United States. The Japanese are intensely jealous of the United States. The Japanese realize that, as at present constituted, Japan cannot do much more than dislike us, which she does. But with China as a resource the time would come when Japan might get on terms of equality, and then Japan has her own plans for procedure. But Japan intends to consolidate the East before she attempts anything else.

At this distance-I am writing in Peking-there is no way for me to gauge the public sentiment in my own country. I do not know whether the people consider the saving of China of supreme importance. I know these two things, how-First, the Japanese will protest that they have none but the best interests of China at heart; but that talk is for consumption in the United States, and in Great Britain and elsewhere. If Japan finally gets her programme through, time will prove the correctness of the statement that China will cease to be an independent country and become a fief of Japan. The Japanese do not stop when they have started. They have a big hold on China now. If they can increase it,

as they hope to increase it, there will be a repetition of the Korean episode in some terms or other. China will cease to be China, but will become Sino-Japan, or Japan-Sino, which describes it more accurately.

The second fact is, that if Japan gets this hold on China the policy of the open door in China and the preservation of the territorial integrity of China, as originally proposed by John Hay, will cease. The door will be open just so far as Japan chooses to open it. The territorial integrity of China will be preserved, and why not, since it will be Japanese territory in effect? Japan certainly will not divide China among the other Powers once Japan has China in her clutch. Japan can preserve the territorial integrity of China by taking all that territory to herself. The preservation of the independence of China is quite another matter.

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In the world of mechanical devices, the machine could either be trusted with actual work, or could be used as a check upon human workmen. For instance, one of these machines might be installed on board a boat which travels over practically the same course every day. The machine would form the habit of responding to every turn in the boat's course, and, working in its own quiet way, it would give no indication so long as the pilot at the steering wheel kept to his habitual course. But if for any reason, he deviated from the normal path, the remembering machine, disturbed in its regular habits, would at once give the alarm by blowing a whistle. After it should become sufficiently trained, it might be intrusted with the steer-

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When the driver wishes to start, he turns a current from a storage battery into the field mounted on the crank-shaft. This starts the gasoline engine. The lever on the steering column then is moved from "Cranking" to "Neutral", the battery is automatically cut out, and

the gas engine runs alone, while the car stands still. When the lever is moved to "First", the first unit becomes a dynamo, generating power which it sends to the second. The second then acts as a motor spinning the transmission shaft, and the car goes under electric power. At the same time, however, the rotating field of the first unit drags its armature after it, but at a slower pace, and at the same time, generates power which actuates the motor unit. Since the armature of the dynamo unit is attached to the propeller shaft, the power of the drag is also communicated to the wheels.

The faster the engine goes, and the more the field current of the first unit is shunted by pushing the lever on the steering wheel into further positions, the greater the magnetic drag in the first unit. Thus at seventh speed the drag is so great there is practically no slippage; hence no current goes to the second unit, and the power is all transmitted by means of the drag—that is, the power of the motor is transmitted directly to the

wheels.

Thus this year witnesses a welter of conflicting engineering tendencies, playing across the backgrounds of steady progress in perfecting the little details that make for convenience, looks, and comfort.

The Ambitions of Japan

By Samuel G. Blythe in the Saturday Evening Post.

HILE the white men of Europe are destroying themselves and disintegrating their territory, the yellow men of Japan are planning to extend their influence, increase their power, and consolidate their fellows of blood and race and color.

That, in a sentence, is the explanation in broad terms of the demands made on China by Japan on January eighteenth last, and then brought to the conclusion of their first phase by the refusal of

China to accede to the stipulations which are the crux of the whole matter, the vital points in the comprehensive scheme of Japan to assume a virtual protectorate over China, and mold China into such an object of offence or defence as Japan's imperialistic desires may dictate.

Certain propositions are too clear to admit of any dispute. The first and most important one is that, so far as Japan is concerned, she has seized this time, when the European Powers are engaged in a hand-tohand struggle for existence, to begin the work for which she thinks herself the anointed Power-the consolidation of the yellow races. Who knows what grand ideas the Japanese may have? Fears of this program have been outlined many times in Western discussions and predictions concerning the Yellow Peril. The Japanese do not call . it that, naturally. Several of the leading Japanese statesmen, including Count Okuma, explained Japan's position to me—for publication in the United States, of course—as that of mediator between the West and the East. It is more than that. Japan does not desire to be mediator between the West and the East. Japan wants to be the East.

The first step consists in the acquirement of the power of directing China. The demands made on China by Japan were the overture for that ambitious pro-



How dare he violate solemn obligations.

—Carter, in New York Sun.

gramme. The time for presenting them was opportune. Great Britain, Germany, Russia, the three Powers most vitally concerned in the fate of China, were at war. Moreover, Yuan Shi Kai, the present President of China, was making such progress with the nationalization of China, and with the organization of that vast, inchoate mass of territory and people into a tangible something and the arousing of a sense of patriotism, that Japan saw clearly that, given a few more years, the Chinese would have a real government and the affair would be far more difficult. Hence, this was the time. Europe, Japan thought, would not or could not interfere, and China was not yet in a position to make an effectual protest. So far as the United States was concerned, Japan held to the view that the United States would not go to war with Japan over the integrity of China, and it is quite likely that Japan held the right The Japanese have no very high opinion of the United States. The Japanese are intensely jealous of the United States. The Japanese realize that, as at present constituted, Japan cannot do much more than dislike us, which she does. But with China as a resource the time would come when Japan might get on terms of equality, and then Japan has her own plans for procedure. But Japan intends to consolidate the East before she attempts anything else.

At this distance-I am writing in Peking-there is no way for me to gauge the public sentiment in my own country. I do not know whether the people consider the saving of China of supreme importance. I know these two things, however: First, the Japanese will protest that they have none but the best interests of China at heart; but that talk is for consumption in the United States, and in Great Britain and elsewhere. If Japan finally gets her programme through, time will prove the correctness of the statement that China will cease to be an independent country and become a fief of Japan. The Japanese do not stop when they have started. They have a big hold on China now. If they can increase it,

as they hope to increase it, there will be a repetition of the Korean episode in some terms or other. China will cease to be China, but will become Sino-Japan, or Japan-Sino, which describes it more accu-

rately

The second fact is, that if Japan gets this hold on China the policy of the open door in China and the preservation of the territorial integrity of China, as originally proposed by John Hay, will cease. The door will be open just so far as Japan chooses to open it. The territorial integrity of China will be preserved, and why not, since it will be Japanese territory in effect? Japan certainly will not divide China among the other Powers once Japan has China in her clutch. Japan can preserve the territorial integrity of China by taking all that territory to herself. The preservation of the independence of China is quite another matter.

The excuse of Japan is the excuse of necessity. She is at the limit of her own physical and commercial expansion. She is a progressive nation. She must expand or she must decay. Here in China is a country, closely related by racial ties, of vellow men as the Japanese are vellow men: of the East, eastern; near at hand geographically; notoriously inefficient in managing her own affairs; just now in the great throes of making a republic where for fifty centuries there was an absolutism. What fairer field could there be for deeds of high Japanese emprise? Everything is propitious. In China there is potential wealth beyond the dreams of any dreamer, and potential military material greater than the world has ever known. Japan can secure an outlet for her crowded and hungry people; place them in a land where, in one part or another, anything can grow that is grown in this world for the utilitarian purpose of man; derive great profits from the ensuing trade; gain new and controlled markets. She can pile up wealth; develop vast potentialities in agriculture, in minerals and in industrial pursuits that shall bring the rest of the world to Japan for products and wares; supply her own wants: get money with which to pay off her staggering debt; and, most important of all, obtain, for military purposes, millions and millions of men, who, once trained, make excellent soldiers and brave fighting men.

One point that should be held clearly in mind by the reader is that this is no sudden determination on the part of Japan, this seizing of China, but is the result of a long-conceived and carefully worked-out plan. Ever since the close of the Japanese-Russian War this idea has been Japan's, and incredible work has been done to make it successful. The country has been canvassed from end to end by Japanese spies disguised as students and patent-medicine vendors, and in other itinerant manners. The only business directory of China is a Japanese business directory, of several large volumes, compiled by Japanese students who penetrated to the smallest villages in this vast country. Every military condition has been canvassed. Many local Chinese troubles have been fomented. Japanese have been sent to every part. Great barracks have been erected. Many soldiers have been placed in advantageous positions. At Hankow, for example, there is a tremendous Japanese military establishment. The country has been planned and mapped and plotted. strategic points have been marked out.

The advantages in South Manchuria and in Shan-tung have been pressed. The Japanese had their groundwork all laid when they made their descent on China

on January eighteenth.

After the fall of Tsingtau, Minister Hioki, who represented Japan in China, was called to Tokio. He went into consultation with Baron Kato, the Minister for Foreign Affairs, and was told what the plans were. Kato had previously submitted the proposed demands to the Genro, or Elder Statesmen, for their approval. Hioki was given a written list of the demands, was told to prepare these

demands in Chinese, to return to Peking and present them in person to President Yuan Shi Kai.

Hioki went to the presidential residence in Pekin on the night of January eighteenth, and presented his demands. In presenting them he made a truculent speech to Yuan Shi Kai, insisting on immediate reply to the demands, and insisting further on positive secrecy about them. Hioki threatened dire things if the full text of the demands, or any intimation of them, was made public. In that case Japan would take summary vengeance on China. Japan wanted the negotiations to be conducted in the dark. and Japan would punish China if any news of what Japan demanded, until after Japan had it, became public.

#### Putting the Screws on China

Yuan Shi Kai summoned his ministers and close advisers. He had made no reply to Hioki save that his country would consider the matter. Presently it began to leak out that Japan had made a set of sweeping and drastic demands on China. Japan met this with the statement that she had requested eleven items from China, and gave a summary of those items. Meanwhile, the full Japanese demands became known to a few men, and were telegraphed to England and America. This literal translation of the demands, so astounding in their character, was so at variance with the official Japanese statement about them that there was a disposition both in America and Great Britain, to discredit the Chinese version. Neither the United States nor England would believe at first that the little paragon of nations, Japan, would do so monstrous a thing to her big but helpless neighbor, China, to which country she was bound by ties of blood, and from which nation she had obtained not only her language, but her religion and her art, and many other phases of her earlier civilization. We were incredulous. So was England.

However, by dint of persistent pounding both the United States and England were convinced that this was exactly what Japan had done. Then Japan saw that she had overplayed her hand. She made haste to explain that what she meant when she said she had made only eleven demands instead of twenty-four was that the ten she had casually neglected to mention were of minor importance and requests only—the ten that were vital and that had occasioned so much astonishment and indigation in other countries. And Japan pressed them all.

There was no belief in China that China could withstand any force that Japan might choose to apply. Japan could whip China in a week. China knew that. China, therefore, adopted the dignified position of refusing to give away her birthright, and told Japan, in effect, to go ahead and take it if she was so foolish. China counted on the rest of the

world's ultimately forcing Japan to get out, and relying on this—for China could make no defense herself—China refused to discuss these various paragraphs that so palpably infringed on her severeignity and independence and put her so completely into the designing hands of Japan. She calmly told Japan to go ahead and do her worst.

Japan hesitated. Japan knows China and China knows Japan. That is, the Chinese know the Japanese and the Japanese know the Chinese. Nobody else knows either very well. Still, it is a characteristic of the Chinese that if an opponent holds on and holds on and holds on ultimately the Chinese will run away. And it is a characteristic of the Japanese to bluff and bluff and bluff to the last minute for everything in sight, and finally to take what they can get. Hence the final compromise.

The new demands, presented by Mr. Hioki, were considerably changed from the former demands, with some easing off of the drastic conditions, some diplomatic evasions, and some omissions.

There are probably no people in the world so anxious for peace as the Chinese, nor so timid. If they were more aggressive, or less passive, half the things that have happened to them would not have hannened. The Japanese knew of this national characteristic and took advantage of it, just as outside races have been taking advantage of it for centuries. Moreover, the Chinese themselves went the extreme limit in their reply to the Japanese in order to avoid trouble. They conceded more than they should have conceded, but they held off on those provisions of the Japanese demands that, in their opinion, infringed on their sover-

There need be no misunderstanding as to what Japan had in mind. Japan sought to establish a protectorate over China, in effect. Japan sought to get a stranglehold on that country, to begin the consolidation of the yellow race. Japan seized on the present as a time when she could put this over without attracting the attention or arousing the indignation of Europe and America, to grab China under the cloak of the war in Europe. If the Chinese had assented to the Japanese demand for secret negotiations and had conceded all the demands, China would be to-day, to all intents and purposes, a Japanese dependency instead of a sovereign country.

This is no matter of speculation. South Manchuria, where the Japanese have had a reasonably free hand for some years, is now almost as Japanese as Japan. At any rate it is not Chinese in the sense that China has any more than a nominal control over it. Tsingtau is practically a Japanese place already. The Japanese, once they get a fingerhold, work rapidly and skilfully.

By publicity Japan was checked in accomplishing, without using military force, what she hoped to accomplish—the taking over of China.

# Trench Warfare

By Capt. W. D. A. Anderson in Scientific American.

HE wonderful accuracy and power of modern artillery have driven armies underground as the only salvation from annihilation. At the same time the enormous numbers of men engaged extend the flanks so far that turning movements are often impossible and battles must be decided by frontal operations.

In the wars up to the Russo-Japanese war in 1904-1905 the campaigns consisted largely in manoeuvring the armies so as to threaten the enemy's flank. Now the important advantages are gained by manoeuvring the heavy artillery so as to bring a preponderance of fire to bear upon a definite length of the enemy's front.

The shattering power of high explosive shells can reduce to a rubble mound any structure on which they are brought to bear. Consequently the military engineer recognizes this physical limitation of the defence and adjusts his structures by utilizing mounds of sand or earth for parapets. The energy of the shell is largely used up in raising a cloud of earth, most of which falls back to place.

After a bombardment a line of field fortifications looks more like a spoil bank than a defensive work, but its resisting power may be little diminished. The very irregularity aids in rendering the exact trench line less conspicuous.

Prolonged bombardment will in time destroy any trench, but an active defense can offset this by continuous extension and reconstruction of the lines of trenches. While the artillery of the defense counterbatters the attacking artillery, the soldiers of the line wield their picks and shovels to repair the trenches. Instead of the dash and glory of historical warfare, the soldier of to-day has the prosaic task of devoting over ten hours to trench work for every ten minutes spent in firing his rifle.

The principle of trench warfare consists in providing a number of lines of trenches so that if one is captured the next succeeding line can be held. By delaying the enemy at each successive trench time is gained to bring up reinforcements

of men and artillery.

The artillery is depended upon for bombardment and for action against groups. Its long range and accuracy permit the batteries to be placed on the reverse slopes of hills from one to six miles in rear of the advanced lines. Here the guns are safe from observation except by aeroplane scouts, and the gun crews are further protected by parapets. So important is concealment that even in these protected localities the guns are screened by being placed in woods or orchards or by being covered with branches or with

CONCEALED ARTILLERY EMPLACEMENT.

The man at the gun does not see his target. The observation of the objective of fire and of the effect of shots is carried out at a distant point. Information is telephoned in to the battery and calculation is made of the change in azimuth or elevation needed to correct the landing point of the shots. In this way the ob-

jective of the gunfire may be changed from point to point as the progress of the action dictates.

The close contact is maintained by the infantry, who depend upon the firing trenches for their effective work. These are deep, narrow trenches with a steep revetted bank on the side toward the enemy. A bench is provided against this bank, or interior slope, so that men standing on the firing bench will be conveniently placed for firing over the parapet. A large stock of cartridges is placed on a bench cut in the parapet so that each man may continue his firing without changing position.

#### FIRING TRENCH, SIMPLE TYPE.

To give the man in the firing trench a still better chance to stop an attacking force the ground in front is covered with obstacles that will delay the enemy without affording any protection. Any device is used, but the best of all is barbed wire. It cannot be shot away, even if cut it coils up and entangles the feet. As chance offers, barbed wire is crisscrossed



But it Always Rolls Back.
—Sykes, in Philadelphia Ledger.

between the posts until a formidable entanglement is obtained.

The trench guard must be close at hand, ready to man the firing trenches on a moment's notice. At the same time they cannot stay in the trenches during bombardment as the protection is so slight that the losses would be excessive. This object is secured by having a cover trench close by, a deep narrow trench from which entrance is obtained into underground shelters.

Where a ravine or reverse hill slope is near enough, the cover trench consists merely of the line of entrances into the bombproofs. In these cellars, or bombproofs, the trench guard sleep, eat, and live during their 48-hour tour at the front. New detachments are then brought up to the front line, while the old guard goes back to the reserve for four days' rest.

Numerous passages are provided for the quick rush of the soldiers from the cover trenches to the firing trenches. If these were direct, the enemy's shrapnel might rake them and prevent the arrival of reinforcements. To prevent this the communicating trenches twist and turn so that every part of the trench is protected by the turn next ahead.

Not only must these zigzag communicating trenches be dug between the advanced trenches, but even far to the rear. Modern artillery can in less than one minute get the range and hit an exposed target two miles away. Communicating trenches must be provided from the first line all the way back until the hills or folds in the ground will protect the rest of the route. Thus, for a zone of approximately a mile along the battle front, every move must be made in deep trenches.

The firing trenches at the front are not necessarily continuous. They are required only to oppose an advance of the enemy along gulleys or valleys or through woods. The open spaces are fully covered by artillery and machine-gun fire. The connecting trenches, however, fill in the gaps so as to make a practically continuous line.

Everywhere provision is made for protection against enfilading fire. The communicating trenches are zigzagged, or are defiladed by roofing them over with logs and mounds of earth at short intervals. The firing trenches are also defiladed by offsets, or traverses, at intervals of about 12 yards. The traverses furnish raised mounds, or parapets, extending across the line of the trench and protect the soldiers from flank attack.

The above description covers only one firing line and its appurtenances. Reserve lines similar to these are dug in rear, at least two of them. As the sapping operations gain ground toward the enemy, new lines are constructed every hundred yards or so. If the enemy's lines are captured they are reconstructed for the use of the captors. At times these operations may lead to an army's having ten or more parallel lines of trenches along a short length of front.

After the simple lines of trenches are completed the troops are kept at work improving them. Deeper bomb-proof shelters are constructed and concrete is made use of for supporting and retaining walls. To take care of the ground water a complete drainage system is dug out with ditches or drain pipes leading to a natural outlet or to a sump from which the water is pumped away. After a few weeks occupation the line of entrenchments becomes a semi-permanent fortification, with underground chambers and communicating trenches.

#### DEFENSIVE TRENCH WARFARE.

In defensive tactics the trenches serve to strengthen a line so that the forces holding it can be reduced to a minimum. The troops thus released can then be concentrated at another point where an attack is to be made. The line is held by maintaining a trench guard in the cover trenches of the advanced line. A few sentinels are placed in the firing trenches, but the main dependence for detecting an advance of the enemy's forces is placed on the concealed observation stations and on the aero service.

The trench guard furnish only a delaying resistance while the forces in the rear are taking their positions. The main line of resistance is far enough back of the first line to give plenty of time for the warning and forwarding of reinforcements. The principal bodies of troops are kept back where they will not be subjected to bombardment.

The front line is then held by a line of sentinels, who are reinforced by the trench guard from the cover trenches. About 300 yards to the rear are supporting bodies who either reinforce the advance trench defenders, or else hold a line to which the trench guard falls back. Still farther to the rear, in a central sheltered position, is maintained a large reserve which is charged with the duty of maintaining the fighting strength of a definite length of front, which for a European regiment of 3,000 men would be about half a mile.

This organization provides successive increases in the strength of the resistance to attack. The main object is to stop the enemy if possible or else to delay his forces until reinforcements can be brought up. Even where the attack is strong enough to break through, the above tactics delay operations so much that troops can be rushed in from both sides to form a new line in rear of the weakened point.

TACTICS OF THE AGGRESSOR.

The aggressor in trench warfare has to use similar tactics for his infantry and must above all have a preponderance of artillery. Without the latter an advance would result only in slaughter.

The advance is prepared by placing the batteries of artillery in concealed positions from which their fire can be concentrated on the vicinity of the point selected for attack. Information is carefully gathered as to the location of the enemy's batteries and lines of trenches. At a prearranged signal the trenches and the ground in rear are bombarded with high explosive shells in order to drive out the defenders. Probable artillery locations and communicating trenches are raked with shrapnel fire. Close watch is kept of the effect of the fire and of any movements of the enemy that can by any possibility be detected.

The troops for the assault are meanwhile gathered in the most advanced trenches. When the enemy's infantry and artillery seem to be driven to cover the signal for the advance is given. The attackers scramble up out of their trenches. Selected groups rush forward to cut the enemy's wire entanglements or to blow up the obstacles in front of his parapet. The rest follow close behind with bayonets fixed for the hand to hand struggle with the enemy's men that still remain in the conflict.

All the time the supporting artillery must keep up its fire. It must quickly locate and silence any hostile guns that open fire on the attacking troops. It must also cover with its fire all the ground in advance of its own troops so as to prevent the enemy from moving up reinforcements. The expenditure of shells and shrapnel thus mounts up to enormous figures.

So accurate is the ballistic control that artillery fire is kept up over the heads of the attacking troops and the shell and shrapnel fuses can be cut to burst only

400 yards beyond them. This bombardment of the ground close in front keeps the enemy's riflemen under cover till the last minute and saves many lives for the attackers. Artillery thus becomes the indispensable arm of trench warfare. The artillery gains the dominance, while the infantry clinches the advantage.

The above describes one incident of the fighting. It requires careful planning and preparation to assemble the troops and to provide the immense amount of munitions needed without betraying the project. From beginning to end the forces engaged must work together with

perfect discipline. The final assault must nearly always be made at night to reduce the exposure and the consequent losses. The cost is great if successful, but is still greater if repulsed.

Every trench gained requires these tactics. Sometimes the assault carries several lines of trenches, but generally the defense stiffens so that only the advanced line is captured. The advantage must be gained one step at a time, each the preparation for the next. Only by a long series of small gains, each tending toward a general end, can an advance be gained that will have immediate strategic results.

## The Blindness of Germany

From Blackwood's Magazine.

INCE the beginning of the war numerous attempts at the analysis of the German character-many of them excellent-have appeared in print. The mentality of the nation, its subservience to officialdom, the scheme of German upbringing, the thoroughness with which things are thought out, and the bases of measures prepared and laid down-all have been the theme either of warm admiration or of cool dissection. But one has looked in vain for a description of one of the most striking features of this war, which is a direct outcome of the system on which the German nation is educated and administered-namely, the entire ignorance and almost wilful blindness of Germany regarding the nations outside her own boundaries.

Not, of course, as regards geographical or statistical information about foreign nations. No; I am sure that every German schoolboy could give points to the ordinary British boy as to the amount of corn-stuffs produced, the population, the history, the rivers on which the big towns are situated, the color of the people's hair, and the ethnological and sociological details of numerous countries outside their respective fatherlands. But as regards the peoples themselves, their trend of thought, the way in which they would be likely to act in given circumstances, the effect of great popular movements-in fact. the nation's mind-of this, not only the German schoolboy but the German man, the German nation, is absolutely and stupendously ignorant.

To give but a few concrete instances regarding our own country in which German opinion went widely and ignorantly astray.

In the first place, Germany was strongly of the opinion that England would not go to war in support of France, and, mark you, for the following reasons:

First, that Ireland was on the verge of civil war, and was so disintegrated that it would be impossible for us to embark on a foreign war without the certainty of a break-up at home.

Secondly, that our colonies were so dissatisfied with the Mother Country that they would break loose and disown her at the earliest opportunity.

Thirdly, that India would rise in rebel-

lion and evict the hated British Raj for all time.

Could any Government have gone more hopelessly and gloriously astray in its calculations than this? And yet it is Germany who has for many years had spies and agents by the thousand in Great Britain and all her possessions, who has spent more money in secret service than the rest of the civilized Powers put together, and who prides herself on knowing, in the minutest details, everything that is going on throughout the world.

Look at the Holy War, the Jehad. which was proclaimed to German order at Constantinople by the venerable Sheikh ul Islam, which the Germans were convinced would cause a general uprising of Mohammedans throughout the world against British supremacy. One would have thought that any one who had been but a few months in the East would have known that although the nominal head of the religion, in the person of the Padishah, resides at Constantinople, and is venerated as Khalifa by a large portion of the followers of Islam, still, the Turks are in most evil odor with the rest of their co-religionists: and the fact that the Turks wanted a thing done would be an excellent reason for not doing it. The ridiculous official story, too, about the Senussi being on the point of attacking Egypt, shows a complete ignorance of the Senussi movement and its aims. Yet the German Agency in Cairo has been working for many years studying native politics, and its chief agent, one Baron Oppenheim, has to my personal knowledge been in close touch with Senussi agents in Egypt.

At the commencement of the Russo-Japanese war the German General Staff put, nay lumped, their money on the wrong horse. Their information led them to believe that the vast Russian armies would have no difficulty in crushing Japan at the outset, and they made no secret of their belief. The fact that their own Colonel Meckel had been chief instructor to the Japanese army, and that this army had imbibed German military views through a number of German instructors, would — one would have thought, have rendered it likely that the

General Staff in Berlin would have some idea as to Japanese prowess and Japanese power on land. But no—the information, if any, was discarded, and the false views of Russian power were adopted. It must, however, be added that, though crestfallen at the miscarriage of their prophecies, the German Staff had no hesitation in taking the credit to themselves for the success of the Japanese arms, and in taking every advantage of the consequent weakness of the Russian military organization during the following years.

But here again they were wrong in their calculations, as it proved. Though, largely owing to Russian military weakness, they succeeded in forcing the Austrian annexation of Bosnia and Herzegovina down the throat of a reluctant Europe in 1909, they went too far in their contempt for the Russian military machine. For it is a fact, though scarcely to be believed, that official Berlin was, as lately as July 1914, convinced that Russia would be too weak to object to the Austrian ultimatum to Servia, and would be obliged to acquiesce, without fighting, in the dismemberment of the Slav power in the Balkans. This, though not to be found in any blue-book as far as I am aware, was the officially expressed opinion of Herr v. Jagow, German Foreign Secretary, and of Herr v. Szögyenyi, Austrian Ambassador in Berlin. It would thus appear that the action of the two Powers in plunging Europe into this frightful war was based on entirely wrong information, and on a complete inability to understand the most important question of the times, and the one which affected themselves of all most closely.

When the Germans first went to German East Africa they appointed as one of their first Governors a certain retired Lieut.-Colonel, who had never been outside Germany in his life. On arrival the first act of His Excellency was an order that all native chiefs within a radius of sixty miles of his headquarters were to come and report themselves to him personally every Monday morning at halfpast nine. The chiefs naturally paid no attention to this order. Whereupon the Governor declared himself deeply insulted, informed them that they should be punished for gross insubordination, and collected a small column, including a field-gun, for their chastisement. After proceeding a few miles the column fell into an ambush, and lost a number of men, including the Governor himself and the field-gun. (This story was related to me by the then President of the Kolonialverein-a charming and most intelligent gentleman-as a sample of the difficulties he had to contend with in colonial administration.) Nor has this type of thing yet died out. The difficulties encountered in German South-West Africa were largely owing to an entire misconception of the native character, the one idea of the Germans throughout the world being that any person with a colored skin, black, yellow, or brown, is immeasurably below any German, and is to be treated as a beast of the lowest type wherever found. Only a few years



# "To keep myself physically strong, mentally awake, and morally straight"

-Third Promise of Boy Scouts Oath.

Any boy who makes that promise, and keeps it, is sure to become a good citizen.

The world needs men who can plan, and work, and endure; and in building boys into such men, right food now is of utmost importance.

# **Grape-Nuts**

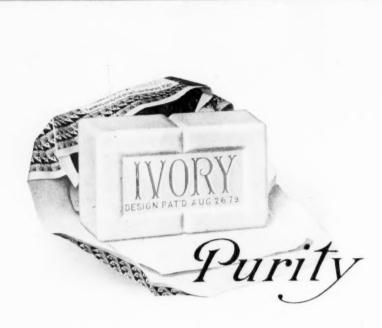
has delicious taste, and contains the vital food elements of whole wheat and malted barley, which Nature easily converts into strength and energy for body and brain.

Boys—and girls, too—can definitely get ready for future success; but there is only one "Road to Wellville"—right living—and that calls for wholesome, easily digestible food.

"There's a Reason" for Grape-Nuts

# Saves Kitchen Waste

There will be no more throwing away of good food if you keep a bottle of Bovril in the kitchen. Bovril, with its fine flavor and ease of manipulation, helps you to make delightful dishes out of cold food. Better soup, better stews—less expense. But it must be Bovril,



IVORY SOAP is pure in that it contains no materials other than those needed for the making of high grade soap. It contains no bleach to make it white; no filler to give it weight.

Ivory Soap is pure in that its materials are refined so thoroughly that there is no dirt or foreign matter in the finished product.

Ivory Soap is pure in that the fat and alkali are combined so skillfully that there is no free alkali or unsaponified oil in a single cake.

IVORY SOAP.



. 99#% PURE

Ivory Soap is made in the Procter & Gamble factories at Hamilton, Canada.

ago, in 1908, did I come across an order just published in South-West Africa to the same old pernicious effect—that certain chiefs were to report themselves ("sich melden"—in the true Prussian military way) at stated periods, in stated places, and at stated times.

One more little anecdote which sheds, I think, a good deal of light on the German view. I was talking to the German Naval Attaché some years back, during some political crisis in England, and he complimented me on the excellent way in which we worked our secret political police! I stared, and asked him to repeat his remark-which he did. I naturally assured him that there was no such thing in England, but he only replied, "Oh yes, I knew you would deny their existence, but that is only to throw dust in my eyes. You know, of course, all the ways in which they are worked, and I assure you that I greatly admire the secrecy with which the whole service is conducted." Nothing would convince him of their non-existence; they existed in Germany, and therefore, naturally, they must exist in England.

I do not say, of course, that in England we understand all the ways of foreigners, or that we study them to a sufficient extent. But I do say that when we come into contact with foreigners, be they white men or black men or any other sort of men, we recognize that they are not as we are, and keep an open mind in which to receive the necessary impressions. We do say, very often, in our insular way, in the way which makes us so beloved throughout the world: "Oh, so and so does this or that in a very extraordinary way; but then, after all, poor devil, he can't help it—he's not an Englishman." And with regard to native races, especially if they are under our sway, we do study them, we make allowances for their point of view, and we deal with them, or rule them, accordingly.

But this is far from being the German way. As already stated, they look on all "colored" races, even the highly civilized Japanese or Indians, as dirt, and savage dirt at that; and as for other white races, they cannot understand, and do not try to understand, that their point of view or outlook on life can be any other than that of themselves, of Germany.

So convinced are they that German education and German hierarchy are absolutely the best in the world—they have been told so by their own officials and their own professors, so it must be true—that they have insensibly acquired the feeling that any civilized country for which they have any respect must be conducted on precisely the same lines: otherwise it would cease to exist.

Nor do they try to find out how other countries are governed. They are so self-centred and so pleased with their own performances and their own greatness that books about other countries are conspicuous by their absence. I do not believe that for every twelve books in England about Germany you would find one in Germany about England.

Their information about England and

the English is consequently on a par with British information about France in the Napoleonic times - viz., that the French were a nation of cowards and lived on frogs. "England," they are told by their professors, who have inherited their wisdom from the musty tomes of their great-grandfathers, and never opened a modern book to find out the truth, "is a nation of shopkeepers. Their one interest in life is to make money. They have become immensely rich by conquering, robbing, and oppressing native races; their greed is beyond belief; their army, composed of mercenaries and therefore hopelessly bad, is ridiculously small and beneath contempt, and the only thing that saves them from ruin is their fleet.'

Such is the genuine belief in Germany—amongst even the highest-educated classes—about England; and all their actions with regard to us are based on the same thesis. Similarly as to other nations; and for proof we need only point to the numerous clumsy and ludicrous failures of German diplomacy throughout the world, for where diplomacy is based on false information and handled by Prussian Junkers, it is hardly likely that it will succeed.

As regards her own affairs, however, Germany is the home of the exact. For Germans the world is ruled out into squares, is classified in tabular form, and is subdivided into water-tight compartments, each under its own appointed head, who lays down rules for the proper carrying out of its affairs. It is this head-man's business to know all there is to know about his particular compartment, and to issue orders about it, and everyone in the compartment must not only obey him implicitly in everything, but must subordinate his will to his-independence of thought or action therein being a thing unthinkable.

Officialdom and bureaucracy therefore reign supreme in Germany. But the result of this subordination to local power -though, I daresay, an excellent principle in theory, and no doubt leading to complete and united action in the compartment—is that every one not only looks up to, but leans on, his superior for everything, and gradually drifts into such a state of mind that he becomes incapable of thinking for himself. Regulations exist by the ton about everything, and it is therefore quite unnecessary for a man to consider what he should doinside his compartment-as every contingency is provided for by superior authority, and the necessary corresponding action laid down.

The Berlin cabman has a little book of 119 rules, which he must learn by heart, telling him exactly what he must do in 119 cases. If there happens to be a 120th contingency which is not provided for, he is lost. But that is beside the point: the majesty of harmonious and grandfatherly administration must not be interrupted by such trifles.

On every pillar-box in Berlin there is a notice: "Do not forget to put the address on the envelope"; and another, "Have you stuck the stamp on?" You are not allowed by the police to discharge or take on a servant except on



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the 1st or 15th of every month. A policeman comes at stated intervals to see whether you have cleaned your windows; and one's domestic arrangements are interfered with to an intolerable degree by the masses of police regulations which have to be complied with at every step.

This is the process which is ceaselessly going on throughout Germany in every university, in every profession, in every department, and in every compartment of German life. Theirs is the following creed: "The State, the great and beneficent machine, has worked out and laid down in every detail exactly what we must think and what we must do. The State has had incomparably greater means and opportunities than we ourselves of finding out what is good for us: it has had the benefit of the wisdom of countless experts in every department, and it has studied the pros and cons of every question; its weighty conclusions, based on the experience of time and history, must consequently be as near perfection as anything can be in this world. Let us therefore thank this kindly Power for its great beneficence in doing all our thinking for us, and obey its behests in everything; for only by so doing shall we move forward, united in body and soul, to the great and glorious destiny that is reserved by the Almighty for the German Empire."

It is this complete dependence on authority which has welded the innumerable interdependent parts of the German machine into the mighty Empire that now threatens Europe. But it is at the same time this dependence and absolute trust in higher authority that has produced the narrow-minded, shortsighted and typical German that I have attempted to indicate. The system has stifled individuality; it has turned out millions of well-educated men and women to exactly the same pattern; it has nipped all independence, free thought, and originality in the bud, and has imposed on all alike a blind and unquestioned faith in the superior, be he officer, official, professor, or statesman, with the necessary result that the German does everything he is ordered to do and believes implicitly in everything he is told by this same higher authority.

The officers who were captured from the Blücher were filled with astonishment at seeing the Forth Bridge still standing, and complimented the nation on its rapid engineering work: they had been told officially that it had been blown un in October! A Bavarian prisoner who was taken the other day in Flanders trembled violently on being captured, and besought that he might be allowed to write a final letter to his wife before being shot! It is still firmly believed by a large number of Germans that the German Army entered Paris in September, and that the Emperor's gracious hands were kissed by the entire Chamber of Deputies; but that the army had to retire from the capital on account of a serious outbreak of cholera: they were told this officially, and therefore it must be true.



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### Why You are Rich or Poor

By Martin D. Stevers in Technical World Magazine.

Some few years ago, an observing man noticed that his heels were pounding on the hard pavement of the city streets in rather disagreeable fashion. He thought that it would help to pad his heels with some resilient material, and tried a rubber heel.

He figured that others would appreciate the same padding, and advertised rubber heels to the public. The idea took hold; and to-day, several fortunes have been made from rubber heels, and a new business that contributes handsomely to the livings of hundreds of men, has been incorporated in American industry.

This is a typical American story of an idea, backed by nerve and business ability, that produced a fortune. The average American who reads it will say, "That chap struck it lucky. Wish I could get an idea like that, and had his ability to put it over," and therewith dismiss the matter from his mind.

And the average American would have hit it exactly wrong. There wasn't an element of luck in the success of the rubber heel. Luck did not give the man his idea, for every live American gets ideas just as good. It was not superior business ability, for plenty of poor business men have more ability.

Why, then, do not all these ideas come to the front, just as the rubber heel did? Why did the "rubber heel" man push his idea, while others fail to do anything?

Why is not everyone rich?

The man who gets nowhere cannot blame his lack of success on the activity of the wicked "trusts" in mining opportunity, for new and thriving business enterprises are being launched every day. It is not merely that the poor man is too cautious," for that difference is a mere symptom of the big fundamental difference.

The secret of why any one man is rich or poor does not lie anywhere in society or business conditions; it is located right in the mind of the man himself. This fundamental fact-this something which explains why one man will take a chance, while another will not, and which shows why one man's judgment is better than another's—in a word, the reason why one man gets rich, while another man remains poor, is found among the processes known, in their somewhat varying aspects, by the simple name of mental

Take the case of Jones. Jones probably ate in a dairy lunch, "in order to save money," and often did so when he really wanted a first-class, well-served meal. Well, such a course was commendable; but every time he did so, he deepened in his mind the tendency to give up any-thing, no matter how much he might want it, if it involved even a trifling expenditure. Far better it would have been for him, had he been somewhat extravagant even occasionally a spendthrift, indulging in luxuries like taxicabs, that he could not afford-for then he would not have





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been daunted in the least by the possible loss involved in accepting his opportunity. Economy, in itself, is commendable; but the man who economizes should do so with a full realization that he is saving, a knowledge of why he is saving, and a real reason, based on intelligent judgment, for refusing to spend money for things he wants. He should not acquire the unconscious habit of saving every possible cent, thus denying himself everything, because that habit in time probably would rob him of the courage needed in taking the chances that are always involved in any new business enterprise. Extravagance, while not in itself commendable, is preferable to habitual penuriousness, because extravagance does not at least rob a man of his courage and aggressiveness in business. The man who saves by "pinching pennies" is apt not to have the courage to use money when he gets it.

The human brain has the peculiar trait of hiding many of its processes from its possessor. For instance, the first time a man visits a certain restaurant, he is conscious of looking about to see where he should go, selecting a table, a chair, and searching the menu; but when he has visited the same place several times, he walks in, thinking of anything that may be engaging his attention, and without realizing what he is doing, finds his chair and takes the menu. Only when the time comes for him to order his meal, does he break his chain of thought, and realize, with all his consciousness, that he is in the restaurant. This faculty the brain has of working out many of the little problems of life, without troubling a man's conscious thought, is the habitual faculty or characteristic which is at the root of success or failure in business life.

For example, we may take the business man who is the head of some great enterprise. Suppose he is in his office, hard at work on some problem, and that a clerk enters to ask him for a decision on some matter. The clerk states the problem, and the business man, without stopping his own work, says "Yes" or "No." An instant later, he could not tell what he said, and would have to have the problem stated again, before he could solve it: but nevertheless, in spite of the fact that his decision was unconscious, it was absolutely correct. He had so developed the proper channels in his brain, that the clerk's question, entering his ear, set up a nervous current that coursed through the "judgment centres," obtained an answer, and directed his mouth to utter "yes" or "no." There was no necessity of taking his conscious mind from its greater task in order to decide the routine matter.

The mediocre man is so because he has no such power. His mind does not give instinctive answers, when he is confronted with knotty business problems; he must stop and puzzle over them to hammer out solutions that may not be correct. Because of this slowness and uncertainty, the mediocre man cannot be trusted with responsible executive positions.

This developed ability to think instinctively is absolutely necessary for business

Every problem is composed of little ones tangled together: and the success of the big man in settling such problems lies in the fact that his brain automatically settles most of the little ones, and presents the result to his conscious mind in the form of a few little problems, which he can solve readily enough. We might say, for instance, that the big problem consists of twenty little ones; the brain settles eighteen of them, and presents only two to the conscious mind for solution.

Our rubber heel man had in his mind the habit of acting decisively when he had an idea. Probably he didn't waste a moment deciding whether to go ahead with his idea, once he had it; his brain settled that immediately, through the action of the "habit channels," and began suggesting ways and means, points to be worked out, and so on. Probably he was actually at work on the proposition before he realized that he had started.

When a new idea is presented to the men who make up some business organization, the value of habit becomes apparent. The sales manager doesn't say to himself, "I'll have to think up some way to sell that"; the mere reception of the idea in his brain has already set the 'habit channels" at work producing ideas to market the goods. The head of the factory has unconsciously begun to dream about where he will install his materials and arrange his machinery; the purchasing agent has begun to figure where to inquire for prices on raw materials; the treasurer has commenced planning how to offset receipts against disbursements in such a way as to keep the investment from depleting his cash supply. And the mediocre man says, "Gee, that's some money-maker," and forgets it forthwith. These different habit reactions are what have given each man, including the mediocre man, his position in the organization.

However, habit is not the only element in a man's mind which determines his future. There is another which is almost equally important in determining whether a man will be rich or poor. This second factor is the way in which habits become fixed upon men.

Fixation of habit is the result of a curious characteristic of the mind. The brain material, so to speak, for the first part of a man's life, is like soft clay; it can be moulded to different shapes, and can form any habits the man desiresthat is, the nerve cells can make the connections necessary to establish any sort of reaction, ethical or immoral, decisive or hesitating, that habit develops. But as the youth or maiden approaches maturity. "soft clay" begins to harden, like clay in the sun; so it is harder to form new habits, or to alter old ones that have been formed. When the man or woman passes middle age, the "soft clay" becomes firmly fixed, and habits of thought and action can no longer be changed. Thus, we have the old man who insists on tying his tie as he did ten years ago, in spite of the clamor of his youthful relatives set up in the hope of getting him to adopt some mode more in vogue; we have the grandmother who is uneasy if she cannot sit in exactly the same place at table for every

In consequence of this, a man becomes used to his place in life by the time he is

thirty or thirty-five, and finds it hard to change. A bricklayer who is forty years old can hardly hope to become a jeweler; an actor at forty would certainly fail should he attempt to take up bookkeeping. A man's field is fixed by that time; and since he can get ahead in his own general field, because of the store of experience and mental habits he can bring to bear on his work, he will do well to stick to the field that has been either his

occupation or his hobby until then.

And consideration of this fact places squarely before each man the question, "What does all this mean to me?" The answer is ready enough. It is this: "You must decide while you are young what you want to be. Be careful that your chosen field affords all the future you want, so that you will not be trapped should you reach the top at forty, only to find that you want to go farther. Then you must decide whether you really want to be rich, and whether you want to pay the price in hard toil, of building into your mind the necessary mental habits that you must have in order to win such a future. If you decide that you do, then get right down to work, and centre every thought of your waking hours upon the one problem of making yourself more efficient, more capable, in your chosen field. That is the way in which you can hope to get ahead."

# Marconi's Wireless Telephone

By J. Andrew White in the Scientific American.

FLEET of war vessels going into action with the admiral transmitting orders to his captains by word of mouth is the latest wonder promised in wireless communication. Following many rumors that a practicable wireless telephone was being quietly developed by Marconi, definite announcement has just been made that the Italian navy has adopted the instrument and the British Admiralty has been conducting tests aboard English vessels. One instrument has already arrived in this country and communication has been established between New York and Philadelphia.

How great will be the distances spanned is not yet definitely stated, but it is reported that Marconi has expressed confidence in his ability to transmit audible speech across the Atlantic by multiplying the power and modifying the design of the present apparatus. It is possible that this feat may be acomplished when foreign conditions are again adjusted to normal. It would not be, as generally reported, wholly a scientific demonstration, for recent developments have given to transatlantic wireless telephony apparatus that would make it commercially practicable under ordinary business conditions. The short distance wireless telephone, however, will not wait for the end of the war. It is expected to become available for commercial use withing a few months and will have a guaranteed range of at least thirty miles between ships at sea carrying aerials 100 feet high and with 200-foot span between masts.



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#### Three Ringers

Continued from Page 39.

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before. And then the catastrophe hap-

Tack McGraw, alias Lucy Binderslat, had the ball and was starting one of his headlong rushes from the side. His check swung his stick around with the intention of giving the speedy Binderslat a sound accolade on the head but changed his mind and brought the stick down in the vicinity of the home man's feet. Tack tripped and went head-over-heels. He rose panting and mad clean through-and minus that fine, luxuriant, auburn moustache that had established his identity as Mr. Binderslat of Huronville.

His check looked at him for a second in amazement and then, tumbling to the situation, called to the referee to suspend

play.
"There's something crooked here!" he yelled. "This outside home man looked too good to me to come out of Huronville."

Several Sebring players clustered around the dumfounded Tack McGraw with threatening gestures. The crowd, sensing trouble, hovered on the ropes, ready to break on the field at any moment. It looked bad for McGraw.

Suddenly a loud voice from down the field boomed out a hoarse warning, "Don't you touch that boy!" It was Red Rogers and he was coming up to the scene of the trouble as fast as his legs would carry him. Red had forgotten there was such a person in the world as Clem Rodd.

This new development threw a fresh bomb into the camp. It was the age of miracles in lacrosse. Not only did cleanshaven youths emerge from behind luxuriant hirsute appendages but the dumb suddenly found the power of speech! The pause that followed Red's lapse, however was short-lived.

"Ringers!" The word ran through the crowd with an electrifying effect. Like water bursting a dam, the crowd came over the ropes in one solid black mass. Pandemonium broke loose.

"Run for it!" yelled Darrell, suiting the action to his words. "This is no place for us."

The three ringers started off together, making for the unroped side of the field. Behind them came the Sebring players and crowd, thirsty for a sanguinary revenge. "Keep your sticks!" panted Dar-"They may come in handy."

They went through an uncut hay field, over a couple of fences and finally struck a ditch with a foot of muddy water in it. Here Red Rogers came to grief, sprawling at full length in the slime and mud. His companions got him to his feet and running again, just in time to escape the vanguard of the pursuing mob.

It was a merry chase, up hill and down dale, along dusty roads and through thick hedges. Luckily the three players were in the pink of condition and managed to hold the pace longer than the enraged citizens of Sebring. In time, therefore, they were able to halt for breath, convinced that at last the chase had been given up.

"Well, we got away with our lives," said Dick Darrell after a pause for breath.

"But very little else," said Tack Mc-Graw, looking down at his naked, mudstained legs.

"We're in a nice fix," groaned Rogers. "Where are we, anyway?"

"We're about two miles, either north, east, south or west of Sebring, which means that we're about ten miles from anywhere," said Darrell. "Our clothes and valuables were taken to the hotel where we were to dress. Do we return to that peaceful village for them?"
"We do not," said McGr

said McGraw, phatically.

"Moved, seconded and carried unanimouly that we do not return to Sebring," said Darrell. "What other course is open to us? The meeting is open to suggestions."

"Let's keep on walking," said McGraw. They kept on walking. Tired, footsore, hungry, lost, penniless, mad as hornets, the three ringers trod the dusty roads, their uniforms wet and muddy, their bare arms and legs covered with mud and plentifully decorated with scratches. They didn't know where they were going but they kept on their way.

In the dusk of early evening they struck a quiet village. It didn't remain, quiet very long after their advent, however. People rushed to front doors to watch them pass and a procession of boys started in their wake. Annoying attentions were showered upon them. And then appeared on the scene a bewhiskered individual in uniform.

"It beats everything how hell keeps up!" groaned Rogers. "Here's the village constable. We'll be pinched now."

"I hope we are," said McGraw wearily.

"I'd rather be in jail than tramping the roads in this rig. We're too darned decollete as to legs. Perhaps the old fellow will lend us some pants."

"What y' doin' on the roads in this con-

dition?" demanded the constable, sharply
"We're lacrosse players," vouchsafed
Darrell. "We played at Sebring to-day
and they chased us out of town."
"What for?" demanded the scion of the

law, suspiciously.

"Don't know, unless it was because we were trimming them," explained Darrell. "Well, it doesn't look just right to me.

I'll have to put you where I can keep an eye on you until I get word from Sebring. Just while I'm at it I'll get in touch with the nearest asylum too."

"Lead us to the coop," said McGraw, cheerfully. "I suppose we'll get something to eat and a bed, won't we?"

A BOUT noon next day an automobile drew up in front of the village lockup and out climbed J. W. Dunn and Jack Sprout. They drew the constable to one side and a roll of bills changed hands. The constable with alacrity opened the door of the jail and preceded them within.

The lock-up boasted only one cell, small, but well lighted with whitewashed walls. It contained three stools on which were seated the lost lacrosse stars, a disconsolate trio, hot, cramped and still garbed only in their scanty uniforms.

Sprout promptly swung a kodak off his shoulder and before they had divined his purpose, secured a snapshot of the group.

"Such a scene as this should ought to go down to posterity," he explained.

They were too dispirited to reply.
"Come, boys," said Dunn, briskly. "I
brought a bundle of your clothes along. We got your 'phone message early this morning and came by way of Huronville. They had the dry goods there. Tumble into them and we'll get started right away. We got to have you in good shape for to-morrow's game, you know."



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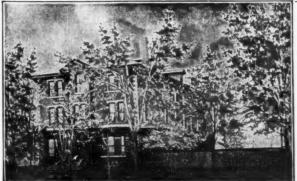
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MONTREAL

"You three ought to get made professionals for this little bonehead play you've pulled off." admonished Sprout. "You're dead lucky so far. They haven't got wise over in Sebring who you are yet and the Huronville crowd are going to protect you. If it gets out about you three being in Sebring though, its a cinch you won't play another game in amateur company."

"What happened over there after we made our getaway?" asked Darrell.

"The Huronville crowd had a rough time of it as far as we could learn," said Sprout. "They were chased off the field and all the way up to the hotel. This fellow Perks, who stacked the cards, seemed particularly unpopular with the Sebring populace. They waited for him outside the hotel and treated him to a shower of

"Bad?" asked McGraw, hopefully.

"I wouldn't go so far as to say they were bad," replied Sprout, "but I don't think the hen that laid 'em was feeling just right. Anyway, Perks came in for so much friendly attention that he got his fill of it. He's resigned his office and quit lacrosse for good."

IT was after the game at home next day that Jack Sprout drew Darrell to one

side in the dressing-room.
"Look here, Dick," he said, "I can't fine you for going off ringing and you know it. The town thinks you and Tack are little tin idols and you've been able to do anything you liked. Now a team that lacks discipline ain't going to amount to much in the long run.'

He drew a snapshot from his pocket and handed it over to the player. It showed the interior of a country lock-up and behind the bars three men in mud-spattered

"It'd kind of raise a laugh down in Montreal and thereabouts-without saying anything about the amateur association," said Sprout significantly. dozen of those printed, Dick. Far be it from me to make any threats-but suppose we decide to have a little discipline on this team in future?"

# The Best Selling Book of the Month

#### By FINDLAY I. WEAVER

HE strong hold Winston Churchill, the novelist, has on the Canadian reading public is again evidenced by the presence, with a good lead, of "A Far Country," published June 2nd, at the head of the list of novels in strongest demand in this country for the month of June as based on reports from representative booksellers throughout the Dominion. It will be recalled that his previous book, "The Inside of the Cup," was the best selling novel in Canada for the greater part of a year, an unprecedented record, in recent years at least. Like "The Inside of the Cup," "A Far Country" is a serious book with an important message deserving of the close attention of those who are concerned about the great problems of the day. This book, however, despite the Biblical source of its title, is not a religious novel like "The Inside of the Cup," but is concerned with the secular questions of political ethics in the national life of the United States, these ethics being not sufficiently unlike those of our own country, particularly in view of the present political mess in Manitoba, to make Mr. Churchill's appeal less strong here than across the border.

From this it will be gathered that this book is far from being a mere romance. As a matter of fact, the criticism is usually offered in regard to each of Mr. Churchill's books, that their weakest features are his love scenes. But the master craftsmanship of "A Far Country," as with his other novels, considered as a whole, is such as to make the love element merely incidental to the working out of the tale and consequently of minor importance.

"A Far Country" is autobiographical in form, the hero being Hugh Paret, who begins his story in these words:

"I was a corporation lawyer, but by no means a typical one, the choice of my profession being merely incidental, and due, as will be seen, to the accident of environment. The book I am about to write might aptly be called "The Autobiography of a Romanticist." In that sense, if in no other, I have been a typical American, regarding my country as a happy hunting

ground of enlightened self-interest, as a function of my desires. Whether or not I have completely got rid of this romantic virus I must leave to those, the aim of whose existence is to eradicate it from our literature and our life. A somewhat

Augean task!

"I have been impelled therefore to make an attempt at setting forth, with what frankness and sincerity I may, with those powers of selection of which I am capable. the life I have lived in this modern America, the passions I have known, the evils I have done. I endeavor to write a biography of the inner life; but in order to do this I shall have to relate those casual experiences of the outer existence that take place in the world of space and time, in the four walls of the home, in school and university, in the noisy streets, in the realm of business and politics. I shall try to set down, impartially, the motives that have impelled my actions, to reveal to some degree the amazing mixture of good and evil which have made me what I am to-day: to avoid tricks of memory and resist the inherent desire to present myself other and better than I Your American romanticist is a sentimental, spoiled child who believes in miracles, whose needs are mostly baubles, whose desires are dreams. Expediency is his motto. Innocent of a knowledge of the principles of the universe, he lives in a state of ceaseless activity, admitting no limitations, impatient of all restrictions. What he wants he wants very badly indeed. This wanting things was the corner-stone of my character, and I believe that the science of the future will bear me out when I say that it might have been differently built upon. Certain it is that the system of education in vogue in the 70's and 80's never contemplated the search for natural corner-stones

"At all events, when I look back upon the boy I was, I see the beginnings of a real person who fades little by little as manhood arrives and advances, until suddenly I am aware that a stranger has taken his place."

These introductory remarks ably prepare the reader for what to expect in "A

Far Country" and its tone is sufficiently serious to prevent those readers whose desires do not rise above sentimental froth, from proceeding any further, which makes it all the more satisfactory to contemplate that this book is far and away the best selling novel of the day, a compliment to the sound appreciation of the Canadian réading public.

As has been said before, Winston Churchill's books taken together, form a complete survey of American life and American problems—"Mr. Crewe's Career" typifying American business; "A Modern Chronicle," American society and manners; "The Inside of the Cup," erican religion, his other books reflecting still other phases of American existence. "A Far Country" is, as nationally characteristic and as vital as its predecessors.

The quotation, "and took his journey into a far country and there he wasted his substance in riotous living," from which the book's title is derived indicates the motif of the story and its scope and tensity, as applied to contem-norary American life. The politicians, porary American life. The politicians, members of the legal profession and other associates of the principal character, are most realistically delineated and of the women of the story, Maude Paret stands out as being probably the best feminine creation of this author

For fear that what has been said here, may engender a notion that "A Far Country" is a tome of seriousness to the exclusion of all else, let it be said that it makes a wide appeal to the heart interest and to the artistic sense as well and especially in the earlier chapters, as for instance the shipbuilding incident of Hugh Paret's boyhood. Although his home was far from water, little Hugh conceived a desire to own a boat and, indicative of his determination to get what he wanted, a characteristic that manifested itself all through his career, when his father refused to buy him one he decided to make one, an undertaking in which he was joined by an interesting company of boys. This work was carried on in great secrecy in the wood-shed where the work went forward with unabated that Hug boys Han build won' her ' othe latti

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enthusiasm in spite of temperature below freezing. The ship-building venture was a close corporation and the mystery that surrounded it, threw a glamor upon Hugh and his associates for the envious boys not within the fold, while Ralph Hambleton, who could have joined the builders, preferred to scoff, saying: "She won't float five minutes, if you ever get her to the water.'

"The cold woodshed became a chantry on the New England coast, the alley, the wintry sea soon to embrace our ship, the saw-horses-which stood between the coal-bin on one side and the unused stalls filled with rubbish and kindling on the other-the ways; the yard behind the lattice fence became the backwater, the flapping clothes, the sails of ships that took refuge there-on Mondays and Tuesdays. Even my father was symbolized as a watchful government which had, up to the present, no inkling of our semi-piratical intentions! The cook and the housemaid were friendly confederates.'

Finally the boat was ready for launching and then arrangements were made with a darky expressman, Thomas Jefferson Taliaferro (pronounced Tolliver) to transport the ten-foot boat to "tidewater" on Logan's pond two miles distant. The "Petrel," by heroic efforts, was got into the wagon, the seat of which had been removed and there, in the bow, Thomas Jefferson perched himself precariously and the journey started.

The maiden and only voyage of the "Petrel" was a perilous adventure. A stiff wind sent her out on the water stern-

"The voice of Grits started us. 'O Gawd,' he was saying, 'we're a-going to sink and I carn't swim! The blarsted tar's giving away here.'

"'Is she leaking?' I cried.

"'She's a-filling up like a barth-tub.'"
The boat finally came to an inglorious end, going down with all hands in little more than half a fathom of water. Fortunately she had been blown clear across the pond and the ship-wrecked sailors found footing on the muddy bottom and all were saved!

Throughout the book the reader's close interest in Hugh Paret is maintained but there is a lack of sympathy with him until the light at last dawns for him through the influence of Krebs, the once despised Harvard "plug," who throughout his life retained the right perspective of life in a world gone money and power mad. Krebs worked to save his age but at last he said: 'I've come to see how little can be done for the great majority who have reached our age. It's hard-but it's true. Superstition, sentiment, the habit of wrong thinking or of not thinking at all, have struck too deep, the habit of unreasoning acceptance of authority is too paralyzing.

Hugh Paret fought that protest "against things as they are" until finally he awoke to the emptiness of his own "success," when his redemption began.

#### CANADIAN SEMMARY

CASADIAN SUMMARI.	
Fiction Po	ints
1-A Far Country, Winston	
Churchill	100
2 Jaffery, W. J. Locke.	55
THE INCHOL TARKINGTON	43
The Man of Iron. Dehan	42
"- Follyanna Grows I'm Porter.	-74
6-The Keeper of the Door Dell	416



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# Efficiency the Keynote of Business

Continued from Page 36.

The expert went to him with the chart and without any comment laid it before him. The president read it through once quickly, glanced through it a second time with a frown and finally looked it over with a rather sheepish smile.

"You make out a good case," he said, looking up. "I'm to blame. I can see that I must overhaul my ideas of efficiency. After all, efficiency begins at home."

There is a moral in this incident. Efficiency is something which must begin at the top and work down through. If it does not permeate all branches of an organization, it does not become real efficiency. One bad apple in the bin will corrupt the whole supply. In raising the efficiency of a business organization it is not only necessary to consider the system in every department but the capability and results of each member of the organization.

And this after all is the most important and the most difficult part. Systems can be devised by the application of proven principles and from past experi-ences. The human equation is less subject to control by set rules. When an executive endeavors to put new rules into operation or to institute a new order of things making towards increased production, he invariably meets a stumbling block or two in the way of unwilling subordinates. Some of the men upon whom devolves the working out of the new ideas he is putting into force consider him unfair or unpractical. They perhaps regard him as a driving task master. They may fear to openly oppose him but they do it in a still more subtle and dangerous way; they render difficult the carrying out of his plans by their unwillingness to cooperate or by refusing the sympathetic understanding of his projects which is necessary to make them fully successful.

OMETIMES plans for improvement are blocked by a more wholesale form of opposition. An amusing incident comes to mind from the experience of a mill expert who was called in to look over the plant of a large cotton concern. careful investigation he succeeded in a general rearrangement of the plant coupled with the installation of new machinery which guaranteed a large increase in production without any material increase in expense. The mills started under the new condition-but the increase, in production did not materialize. The expert, figuratively speaking, pulled to pieces the whole structure that he had built up and laid the parts before him for a minute study as to the reason for its failure. He could not find a flaw. he turned his attention to the human equation. The mill hands were mostly girls. He studied them carefully and soon fell on to the reason for the state of affairs. The girls were mostly young and lived at home. When they carried their pay envelopes home at night their

parents superintended the opening and left in the possession of each girl a minimum amount for the expenses of the following week.

Why should these girls take advantage of the opportunity for increased production? They would increase their pay but no increase would come in their allowance. The increase would go to their unyielding parsimonious parents. The solution was simple. Any remuneration due the girls for increases over their previous normal capacity of work was paid in the form of a bonus at intervals of a monthand was not included in the regular pay envelope! Production increased 33 1/3 per cent. inside of the first month.

This instance is not cited as the proper procedure necessarily under such circumstances but rather as an illustration of the difficulties frequently met with in developing an organization along lines toward increased production.

E VERY business man to-day faces the dual problem of determining his own personal efficiency and that of his organization. If there is anything lacking in either direction it must be found and corrected.

Efficiency, not the distorted fever for speed that is sometimes called by that name but the science of getting the maximum result with the minimum effort, is the Keynote of Business to-day.

#### Paper Pulp from Uganda

The demand for paper pulp is increasing rapidly, and the denudation of the vast forests of the soft woods, adapted to this branch of industry renders it necessary to discover alternative sources of supply. In this respect some interesting experiments have been made with the stems of the elephant grass-Dennisteum purpureum-which flourishes so luxuriantly in Uganda. The pulp produced from this raw material is found to be of good quality. Doubtless the prosecution of this industry would be of far-reaching economic importance to the East African colony, but unfortunately the nearest available markets are at a considerable distance. The commercial prospects of the development are, therefore, affected by the transport charges of the pulp, and also by the supply of limestone suitable for causticating soda-ash, which at present has to be imported. If these two problems can be solved satisfactorily a promising future is assured, inasmuch as the raw material is extremely abundant, tracts of country extending over many hundreds of square miles, which are generically described as "bush," being densely clothed with this grass. The experiment is being conducted upon sound scientific and commercial lines, a British firm of paper manufacturers being interested in the scheme and co-operating with the Imperial authorities.

# Canoeing for Girls

By Mrs. Emerson Hough in Ladies' Home Journal.

CANOE is the thoroughbred of all water craft; it is stronger than it looks, and it has ultimate resources upon which you can depend. Take an eighteen-foot canoe, which will measure thirty inches across the cockpit. Its beam will be much greater. Turn it up edgewise and its floor will seem as wide as that of the Great Eastern. For comfortable cruising a good-sized canoe is better for all beginners. Sixteen feet is small enough for the inexpert. Twelve feet is too small for any but the most expert.

The round-bottomed model paddles most easily and is most easily handled in fast water; but that is the Indian, or expert, type of canoe. The beamy, lake model, even although it has a slight keel of perhaps an inch in depth, is better for the average girl's use. In canoeing there is such a thing as safety, and "safety

It is said that a great many sailors of the navy do not know how to swim. No doubt many women have used canoes who themselves were not swimmers; but it is much better for any woman who uses a canoe or any other sort of water craft to be able to swim.

Everything about the canoe is light, compact, graceful, delicate, dainty, serviceable-that is to say, thoroughbred. For a vacation trip you can put your silk canoe tent in your pocket. You can put your canoe cooking outfit in another pocket. You can carry in one hand enough canoe provisions to last you for a considerable voyage. Instinctively you learn to reduce your fishing tackle, your bed, your personal equipment, to the lowest possible dimensions. Once deep enough into the pastime of canoeing to learn that it is practical and safe, you will find it the most delightful of all outdoor sports. It is easily the most beautiful. Even in ordinary practice in many of its phenomena it is the most spectacular sport.

For the most part the dress of the woman canoeist is that of the woman in camp. Wool underclothing is desirable for a long trip, for the nights are apt to be cool, but khaki and canvas, especially canvas shoes with rubber soles, will be found useful. Cotton goods and canvas shoes

dry out quickly.

Nailed boots of any sort are taboo about the canoe. Your canoeist, whether male or female, goes in for sprightliness, snap and color, so that the blazer or the jaunty hat will prove more acceptable in the canoe than with the pack train in the mountains, or even around the summer hotel. Indeed, this is the most pictorial of all sports, as any wise woman will not be slow to realize.

In other forms of camp life a woman may go in for comfort, but in canoeing the glory of a girl is in her tan. The costume is no more than will mitigate the process of sunburn. It may be said, however, for the sake of the beginner, that a bottle of carron oil-which is nothing but lime water and linseed oil, half and half-will take out all the pain of that sunburn. As to mosquitoes, if they are not bad enough for you to require head nets and gloves, a tube of fly dope made of petrolatum and citronella oil will be found less odorous than the ordinary mixture of tar and oil affected by the male contingent.

As to the mastery of the craft itself, any woman should first study the theory of the canoe. It is like any wild or thoroughbred creature-dangerous to the inexpert but docile to its master. A deep-sea ship is safest at sea. The same is true of a canoe. Loaded and afloat, in motion, and governed by a master hand, it is safe, and it offers the very poetry of travel. woman ought to get into the heart of these secrets. She soon will learn that if any part of the canoe touches shore or bottom, it is tipsy and unstable. It is safest when fully afloat.

In order to enter a canoe safely take your paddle, reach entirely across the canoe, and let the blade take the bottom on the farther side. As you step in rest your weight on your paddle and not on any part of the canoe. Step in over the exact centre of the boat, and ease yourself down into place, whether flat on the floor of the canoe, on one of its cane seats or on one of the round canvas dunnage bags holding whatever equipment you may be carrying with you.

The smooth skin, the round bottom and the sharp ends of a canoe are made for ease and speed in traveling. The centre of gravity must be kept exactly on the middle line and as low as possible. Keep your hands off the sides of the boat. Keep as low as possible. Keep in the middle. Do this, not part of the time but all the time. Never at any time try to stand up in a canoe, whether it is moving or sta-tionary, or far from or close to the shore. That means a wetting at least, if not

worse.

Canoe stunts, such as white-water work or canoe sailing of any kind, ought never to be undertaken by women. It is all very well for novelists to write about heroines thus engaged, but you would better leave that to the heroines of fiction, who do not need to come back to superintend anything so prosaic as a dinner. Foolhardiness in canoeing or in any other sport ought to be discouraged. It will be many seasons before the average woman canoeist will get anywhere near to the expert capacity of this craft. Far this side of such limits lies a wide margin of safety, comfort and sane enjoyment.

Whether on a long trip or close at home, whether carrying bed and board along or serving simply as a means of transportation, the canoe is the biggest little boat in all the world. It has history back of it, and evolution, and type. It has a great heart, a thoroughbred soul. About it cling beauty, independence, fearlessness, courage, endeavor, novelty, adventure. Above all it is individual in its appeal.

Sports that are most serviceable to us are those in which we actually take part. The Romans went in for the sports of the arena; they paid their money to see other men work or fight or play. Many of us have seen the ruins of the Coliseum; but we have not yet seen the end of the



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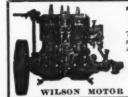


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barbarians who did the playing or the fighting there.

Many of these underlying truths apply as much to women as to men. There is no proper comparison between the hardy, sun-tanned girl of early autumn, who has spent days or weeks on the water, and the soggy matron, Roman or Saxon, who found her amusement through buying a ticket to something where she watched and did not participate in the game. It is the especial function of this beautiful and spectacular sport that it compels us to get into the game. It always has been individual and amateur, and always will

# Love and Marriage in Pigeon Land

By Elisha Hanson in Everybody's Magazine.

OMESTIC life nearly approaches the ideal among pigeons. Except for the intervening of man, it probably would be ideal. Pigeons, if left to their own choice, marry from love and live together until death separates.

A breeder can turn twenty pairs of pigeons into the same enclosure safely. There will be no shifting of partners. And if the males and females of all these pairs are separated for the winter and brought together in the spring, each male will immediately pick out his own former mate and proceed dutifully to the building of a home and the rearing of a family.

Further, the affection of pigeons seems sometimes to be stronger than the affection of men. Frequently, when death claims one bird, the mate will commit suicide from starvation.

However, just as among men, so among pigeons there are differences between individuals, and there are also differences between the two sexes in their standards of morality. In a way, pigeons may be said to have the "double standard" of said to have the "double standard"

Among the males there are large numbers of individuals who are perfectly willing before marriage to flirt with every little hen they meet.

After marriage, among pigeon males, there is a great change. They devote themselves, most of them, entirely to their responsibilities as householders. fall into a routine. This consists of building a home and of rearing one brood of youngsters after another.

There is a class of married male pigeons, however, whose sole object in life is to pose as beaux, who make love to every lady of their acquaintance, and who are continually in trouble with husbands and lovers. They are just as annoying in a community of pigeons as the mashers on Broadway.

Finally, man has the institution of divorce. So has the pigeon. But he didn't invent it for himself. In nature there is no divorce among pigeons. But man, who has introduced many complications into his own life, has also introduced the complication of divorce into the life of

Every fancier, if he is dissatisfied with the progeny of a pair of his birds, immediately proceeds to separate them and to remarry them to other spouses, in an effort to improve the young. Eugenics is given the acid test among pigeons. Frequently it fails, but more often it succeeds.

At the present time I have in my loft a pair of fantails, each of whom was recently divorced from another mate. A

loft is the fancier's term for the place where he keeps his birds, whether it be an actual loft or a shed on the rear of a city lot or a room in his basement. A fantail is one of man's most wonderful creations in pigeons, a bird with a small body and with a huge tail, which it keeps spread like a fan most of the time, in peacock

The Dancing Master, who is the husband in my pair of remarried divorcées, is one of the finest specimens of the fantail in existence. Snowflake, his new wife,

is equally good.

The previous owner divorced both couples from their first mates, took the Dancing Master from one home and Snowflake from the other, shipped them to me, and told me to marry them when I received them.

Now a forced marriage between pigeons is not wholly unlike many marriages among men. The principals are introduced and given some time to get acquainted. Then, if they do not quarrel too vigorously, they are sent out into life together. Occasionally one bird or the other will absolutely refuse to mate with the bird selected by the marrying agent.

When I received Snowflake and the Dancing Master, I placed them in adjoining cages. It happened that it didn't take the Dancing Master long to see what was the proper thing to do. Within a few hours he was ardently making love to Snowflake. But for several days she scorned him. As I was about to give up hope, I caught them stealing a kiss through the wires of their cages. I burst in upon them they immediately appeared just as unconcerned as any young couple of lovers suddenly intruded upon in their love-making. I knew, however, that my work was well started toward completion, and so I placed them in a cage together. A few hours later I put them out in my loft, where they now have

In divorcing pigeons and in remarrying them to other partners, man does not seem to interfere with their permanent happiness. When the new unions are finally formed, there is as true a devotion among the new pairs as there had been among the old. It is the nature of pigeons to be in love and to be loyal. Yet there doesn't seem to be any absolute loss of memory of former mates. When divorces have been accomplished, it is exceedingly dangerous to bring a former husband into too close a proximity to his successor; for in such cases there is certain to be a quarrel between the two males.

There is nothing so similar to a young people's dance or frolic as the assembling coq the dan

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of young male and female pigeons who have never been mated before. The hens will get into one group and the cocks into another until some one announces "choose your partners." And then, when the choosing begins, there is just as much confusion, just as much bumping, just as much treading upon toes, just as much coquetry, just as much importance among the males, as there is when men choose their partners in one of the old-fashioned dances.

My third pair of fantails are such ideal lovers that I haven't yet made up my mind whether they will prove good parents. I call them Paul and Virginia. He is a magnificent bird, a little too large for the show-room, but exceedingly showy in the loft. Virginia is a dainty little thing. From a eugenic point of view they are the best mated pair I have; for the defects of one are balanced by the good qualities of the other. They were so busy making love, however, that they failed utterly to build a suitable nest for their pair of eggs, and at last I was forced to build it for them, after they had laid their eggs actually on the bare floor of their nest box.

Every minute of the day Paul is either making love to Virginia or feeding her some dainty, or else he is reclining in the sun while she lovingly runs her beak through his feathers. He cars for nothing in the world except her company, and she is wholly wrapped up in him.

This, manifestly, in not a marriage "to get away from boarding and have home-cooking." This is a grande passion.

In looking over the institution of matrimony among pigeons, it is impossible to avoid feeling that nature itself makes the original pattern in such matters and that artificial conditions merely improve that pattern, or disarrange it, in details. The basic design is the work of the Creator Himself, and as it was in the beginning so it shall be in the end.

#### Short-Range Torpedo Used in German Sea Raids

It has been reported that in its operations against unarmored merchant vessels and transports, the German navy has made use of a small, short-range torpedo which costs much less than the ordinary weapon and may be made in approximately half the time required in building those of a larger type. Torpedoes are expensive instruments, the German type ranging in cost from \$6,000 to \$12,000 each and demanding much time in construction. The short-range torpedo, which, instead of being capable of shooting through the water for from 4,000 to 10,000 yards, is effective up to about 1,500 yards, costs about \$2,200. In place of carrying an explosive charge of 250 or 300 lb. of guncotton, it uses 100 lb., and also does not require much of the intricate propelling and steering mechanism that is needed in the larger ones. The purpose of the new torpedo is to conserve the supply of the full-sized ones needed in regular naval operations, which would be greatly depleted if used in blowing up merchant ships.

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## The Story of the Hurons

Continued from Page 41.

The Huron mission languished between 1617 and 1622, although Father Poullain visited the Nipissing country during the summer of 1619. Work was resumed in 1623, when Le Caron returned, accompanied by Brother Sagard, the historian, and Father Viel. The first two returned to Quebec the following year, after having compiled a dictionary of the Huron language, and Father Viel was drowned on his way east a season later.

The Récollet mission in Canada was supplemented in 1626 by the arrival of a company of Jesuit priests, among whom were Lalemant and Brébeuf. Eighteen years had elapsed since the founding of Quebec, and its population was but one hundred and five, including men, women and children. Brébeuf, with two others, set out in company with the returning Indians soon after his arrival, and reached the Huron country in August, where he continued the work of the mission for three years.

After the taking of Quebec by Admiral Kirke in 1629 Canada remained in possession of the English until it was ceded back to France in 1632. During this time there were no missionaries in Ontario. The next missionary period began in 1634.

The history of the Jesuit mission to the Hurons during the next fifteen years is one of the most thrilling chapters in Canadian history. During these years upwards of twenty-five missionaries were engaged in the work, and at least five of them suffered martyrdom. From village to village they went, teaching, preaching and baptising in the name of Him whom they served. After few years they established a headquarters of their own a little to the east of Penetanguishene, where they erected a chapel, mission house and hospital, surrounding them with a stone wall and a wooden barricade. From this centre, which they called Ste. Marie, they conducted missionary operations not only among the Hurons but also among the Petuns and the Neutrals.



Father Lalemant.

But during all the years of the Huron mission there was the constant Iroquois menace. The French traded with the Hurons and Algonquins, and the Iroquois with the Dutch, by whom they had been supplied with brandy and firearms. Champlain's alliance with the Hurons and his expedition to the Iroquois country had but intensified the enmity. Communicathe circuitous course of the French River and the Ottawa, because of the dangers of ambush and attack. When the Huron trading parties were strong, the Iroquois harassed their trail and raided their camps; when the latter were the stronger, the Hurons were massacred on the spot or captured and reserved for torture.

The finest hunting grounds for beaver lay to the north and west of the Great Lakes, and were largely in the hands of the Hurons, who carried their peltries only to the French at Montreal and Three Rivers. The Iroquois, jealous of their rivals in the north, determined to secure this trade for themselves. In order to accomplish it, the tribes which stood in their way must be destroyed, the Ottawa route closed, and the trade diverted from the French settlements to those of the Dutch and the English on the Hudson.

The first blow in this desperate campaign, which seems to have been planned with cunning, skill and daring, was struck in 1642, when Contarea, a fortified frontier village in the Huron country, five miles south-west of the present town of Orillia, was captured and its entire population either killed or taken captive. In 1648 the Iroquois returned and took the village of St. Joseph II., destroying it by fire and taking as prisoners some seven hundred of its people who were unable to escape. Father Daniel, the first of the missionaries to suffer death at their hands, was shot as he stood at mass, robed in surplice and stole, and every savage had a hand in mutilating his body.

These successes inspired the invaders to further conquests. They established a strategic base to the east of Lake Simcoe, crossing into the Huron country at the Narrows. On March 16th, 1649, the village of St. Ignace was attacked and destroyed, only two of the villagers escaping either death or capture. A few hours later the village of St. Louis was entered, and after setting it on fire the Iroquois returned to St. Ignace taking with them Father Brébeuf and Father Lalemant to be tortured. The terrible treatment of these two missionaries at the hands of the barbarous Iroquois is one of the most dreadful tales in the pages of our history. Brébeuf, though of stronger constitution, succumbed after four hours of torture, while Lalemant, of less rugged build, survived until the following day. charred and mangled bodies were found after the retreat of the Iroquois.

When news of the massacre reached the Christian Hurons in the village of Ossos-

sane on the following day, a party of warriors engaged the Iroquois, and an obstinate struggle took place near and within the palisades of St. Louis, which had remained intact when the village was burned. By sheer weight of numbers the Hurons were overcome and destroyed, although the invaders lost heavily in the battle.

A day or two later the Iroquois set out hurriedly for home, laden with spoils and with prisoners, leaving the Huron remnants in a panic of despair. The country soon became a vast expanse of smouldering ruins; village after village was destroyed and then abandoned, lest something of value should fall into the hands of the dreaded Iroquois. The panic spread from lodge to lodge, the people scattering whither they could. Some found their way across the ice on Nottawasaga Bay to the country of the Petuns, others sought shelter in the Blue Mountains, while others in the hope of finding safety removed to what is now known as Christian Island, a short distance from the mainland. Here also the Jesuit missionaries decided to establish their mission and make their head-

In December of the same year the Iroquois, flushed with their success of the previous spring, returned to complete their work of conquest. Their attention this time was directed to the Petuns, and once again desolation and despair followed their visitation. It was not warfare, but butchery, and two more brave missionaries, Father Garnier and Father Chabanel, are sent to join the noble army of martyrs.

Having destroyed the villages and lodges and practically all the warriors of the Hurons and Petuns, the Iroquois next turned to the Neutrals, their own neighbors to the west of the Niagara River. The events of the fall and winter of 1650 and 1651 were, if anything, more dreadful than those of the previous year. The slaughter was terrible, especially among the aged and very young. The men were not a fighting race, nor were they expert canoemen, and they proved no match for the huge invading bands from New York State. The number of prisoners was unusually large, and consisted mainly of young men and women, who were taken back to the Iroquois camp, where they became merged with the Seneca nation.



Father Brebeuf.

Within ten short years one of the greatest national tragedies in the human race had been enacted-three native races had been practically exterminated, and the whole country between Lake Erie and the Georgian Bay depopulated. A few only had escaped, and of their descendants but a few small bands now remain. At Lorette, near the city of Quebec, is a small reserve consisting of about five hundred persons, the descendants of those who escaped to Christian Island. Owing to their isolation and to the harassments of the ubiquitous Iroquois, they had been compelled to leave their refuge, and, accompanied by the French missionaries, they made their way as best they could to the shelter of Quebec. Another band, after much wandering in the West, returned, towards the end of the seventeenth century, to the Detroit River, and formed three settlements, one on the east bank at the present town of Sandwich, another on the western bank of the river, and a third on the south shore of Lake Erie near Sandusky. Another band occupies a small tract of land in a corner of the Indian Territory in the United States.

The story of the visit of Champlain in 1615 followed by the Jesuit mission to the Huron country from 1626 to 1650 is the complete first chapter in the history of Ontario. No effort was made at the time towards development or settlement, and it is probable that there were never more than sixty Europeans in the Huron country at any one time connected with the Indian missions, although the traders and trappers throughout Ontario associated with the French settlements and trading posts in the province of Quebec may have

been numerous.

For many years following the dispersion of the Hurons the known history of the province of Ontario is singularly slender. The old trade route up the Ottawa and across the French River to the Georgian Bay was doubtless used to some extent in defiance of the Iroquois menace, although at a later date it gave way to the less arduous trip across from Lake Ontario to Georgian Bay. A mission was established at Quinte on Lake Ontario in 1666, and about the same time Marquette founded another at the Sault. Joliet had penetrated Western Ontario and had made an expedition under direction of Talon to explore the copper mines of Lake Superior. Father Hennepin visited the Humber River and Niagara Falls in 1678, and LaSalle two years later crossed from Lake Ontario to Georgian Bay by way of the Humber and Lake Simcoe. But apart from such expeditions and the visits of traders, the province of Ontario had no well defined history until well on in the eighteenth century. The story, however, of its discovery in the search for the North-West passage, of the visit of the great Champlain, of the founding of a mission among the native races then in occupation, and the tragic ending not only to the mission but also to the Indian nation itself, are among the notable events in our history.

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# The Confessions of Sir Horace Lazenby

Continued from Page 44.

Bradburn was a good salesman and had a good connection. He took out samples of underwear made by the Pearson mill and secured more orders than the mill had capacity for—for the Pearsons had been lack-a-daisical in getting business. paid more attention to the quality of their product than anything else. In three months the two mills were working in easy fashion and piling up earnings. Buying for the two, Bradburn and I got better terms for everything. Two years after my first meeting with the Bradburns I owned seven knitting mills of one sort or another Four I had put out of business to kill coupetition. Their good-will and general trade connections I turned over other three. Bradburn was now chief of the sales department and we had two travelers, old country-trained.

But there were five strong mills-not large ones but mills with good standing and well-backed apparently-that seemed impregnable. They were using just as I was using, every device to get trade. Offers to buy them out failed. Offers to amalgamate failed. The owners or seeming owners, were evasive. Bradburn and I were already seriously enough worried when we learned one day that he had been refused orders from the Golden Star Corporation and the John Goss Company of Montreal! My own child had turned me down!

Bradburn was aghast, but his surprise was pale compared to mine. I had been away from the wholesale business for a long time. I had scarcely bothered to attend board meetings and I had merely sent letters of condolence when two of my fellow-directors died. Now my suspicions were aroused. I took the night train for Montreal to find Mr. Aiken, chairman of the board.

N Montreal in the morning, being slight-IN Montreal in the invitate, the office of the Goss warehouse first and talked with the highly respectable local manager.

"By the way," I said to the old fellow, "Where are we getting our knit goods?"

"Hosiery and underwear, sir?"

"Yes."

"Some we import."

"But the rest?"

"Various mills, sir. Perth mills, Larsen mills-" He named only my competitors.

"Ever buy from Bradburn? Or Pear-

"Used to. Cut them off, sir?"

"How was that?"

"Orders, Mr. Lazenby. I guess you weren't here at the time.

"Chairman of the board?"

"Mr. Aiken, yes, sir.'

We talked about other things and then I left to find Aiken.

There had been a time when Aiken sniveled when he addressed other members of the board. I noticed as soon as I entered his too prosperous office that this

was no longer the case. With wealth had

come assurance, not to say insolence.
"My dear Lazenby!" he exclaimed with affected delight, coming forward from behind his desk with hands outstretched, "Where have you been? We haven't had you at a board meeting for a long timeand even then we had only a glimpse of you. What have you been doing?"

"What have you been doing?" I re-

torted.

"I? Working! Working!"

"Hmph!" I retorted, "Pretty successfully too!"

"Why-what-why, of course, Lazen-

"Well, why the devil have you given orders to buy knitted goods only from the Perth, Larsen, Oltroon, Kent and Lincoln

It was not what he had expected. He was confused for a moment, then laughed.

"Why, of course you did and you know

"Indeed. You speak somewhat certain--not to say loudly and-er-rudely, Lazenby. Well—possibly I did. Possibly I did. What of it?"

"I want to know why?"

"Why? Because those mills gave us the best prices I suppose."

"Did you give my-did you give the other mills a chance to better their

"It was not necessary, Mr. Lazenby," he "There was a question of whose goods we should handle and it was left for me to decide. I ordered where the goods were cheapest-and best."

"You mean you ordered from the bunch of mills that are bucking my mills," shouted. "But you can't put that over, Mr. Aiken. No sir. If our prices are as good as theirs I guess I can have something to say about things."

"Indeed? Of course. I had forgotten. You have your vote on the board—if you wish to make it a board matter."

"I will make it a board matter," I retorted, "and at the very next meeting." "We can have a meeting any time," he

purred coolly. "This afternoon then."

"Very well. At four."

The coolness of the fellow was thoroughly annoying. He was impudent and impudence from men of the Aiken class is intolerable.

At ten minutes to four I was in the board-room at the John Goss warehouse. I sat down alone in one of the chairs at the board table. At three minutes to four a clerk walked in, sheepishly. At four two other clerks came in. At four-one, two others came in and sat down. I stared at them. What right had they to be here? At four-two Aiken entered, smiling, bland.

These others looked like dummies. "Everyone here?" he murmured, "O, Mr. Lazenby, I forgot to mention the

names of these other gentlemen. We have had some new directors elected while you have been so busy in the-er-knitting business. Mr. Jones, Mr. Lazenby-" and so he rattled through the introductions. "Where's Goss?" I demanded, forget-

ting for the moment that Goss had sold

out to Aiken.

"I hold his stock." "And Simpson?"

"I have his widow's proxies."

I gnawed my moustache.

"And Cardon?"

"He sold out to me recently."

"Damn it," I shouted. "How many shares do you hold anyway?"

"I have a controlling interest, Mr. Lazenby," retorted the rogue. "You were not aware, I suppose, of that fact?" "Aware?" I cried. "Aware of robbery—

prove it!"

"With pleasure." He pushed the call button and the accountant came in. Receiving his instructions he went out again to return shortly with the books showing that, while I was dabbling in outside ventures, I had allowed myself to be bought out of the control of the wholesale trust.

Nothing could have cooled me quicker. "Thanks," I said. "Is there anything else to come before the board?"

"Nothing-unless you wish to reopen the discussion of knit goods."

"What do you know about knit goods?" I returned.

"O-a little," said Aiken.
"A little!" Then the meaning of his tone penetrated my intelligence. "By gad! You mean-you own the-you are behind the other mills?"

"I-I have a slight interest in them," mocked Aiken.

I walked out.

There was real work to be done now. Aiken had control of the wholesalers-the best possible distributing medium for certain standard lines of my knitted goods. He had control also of the heaviest competition I had to face. That evening I spent in the lounge of the Windsor talking with one of the chief lawyers of the C.P.R. He was a man of wide experience, needless to say. I put the case of the Wholesalers' Guild to him—but by hypothesis, mentioning no real names. asked him if no legal action could be taken against such a combine.

Before I had finished he laughed out

"Quit bluffing," he said. "Don't try to give me any of your hypothetical cases. I know who you mean. It's your own Wholesalers' Guild you're talking about. Cut out the worry, Horace, my boy. Cut it out. You're safe. Dead safe. They can't touch you."

"Can't touch me?" I echoed. "Hang it all-I want to be touched!"

"You-well I'll be blanked. What's the matter? Sore?"

"Aiken's got control."

"O! That's different. What were you doing all the time?"

'Asleep at the switch," I groaned. "If I were to moralize I'd say: 'Never do business hereafter without a lawyer to

help you,'" he said.
"The devil! I don't want your moralizing. How can I oust Aiken?'

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"You can't. Unless- Humph! Who drew up your papers of incorporation?"

"Jennings. Goss's lawyer."

"Jennings! Let's see. I'll have a talk with him.'

"Strictly confidential," I reminded him. "Don't mention it," he retorted. "Here's Jennings now." He pointed to an elderly prosperous-looking lawyer who was crossing the famous old rotunda from the clerk's desk to the cigar stand, "I'll ask him something. Wait."

I waited impatiently. When my C.P.R. friend returned he was smiling and smok-

ing another new cigar.
"'S alright," he chortled. "You can skin him if you're quick."

"Who?"

"Aiken."

Then he began to whisper and chuckle close to my ear.

#### New Life-saving Garments

AVA kapok, a downy substance made from vegetable fibre which hitherto has been almost exclusively used in the soft-goods trade, owing to the combination of warmth and lightness, is the most suitable material for charging lifesaving appliances, being five times more buoyant than cork. The objection to the ordinary life-belt is that it has to be donned hurriedly in an emergency, and in the rush and confusion of panic it is apt to be wrongly adjusted, when it is sure to prove a failure. An inventor has conceived the ingenious idea of combining the kapok appliance with garments which could be worn continuously, and could therefore be relied on without the slightest apprehension in time of sudden danger. This new application of kapok has been very successful, and a life-saving jacket has been devised which is perfectly safe, as even the nonswimmer is not in the slightest danger, and whether injured or insensible there is no risk of sinking. Belief in the efficiency of this appliance has received ample testimony, one of our largest transatlantic liners having been equipped with more than three thousand two hundred jackets. In the recent naval disasters hundreds of valuable lives have been lost owing to the lack of life-saving appliances. This want can be met by the aid of the kapok waistcoat made in a form suitable for everday wear, the style being capable of variation to meet individual requirements. It can be worn either under or over a jersey, and there is not the slightest interference with the free movement of the limbs. Two pockets are provided for flasks if desired. Although the waistcoat is apparently insignificant, sufficient kapok is carried to support a heavy man in the water for at least thirty-six hours. The new life-preserver can also be utilized for teaching swimming, or it may even be used by swimmers. At the same time, should the expert swimmer be seized with cramp or suffer an injury, there is no danger of drowning. The outstanding feature of the system is that the position into which one is thrown when immersed is precisely that which would be assumed naturally if the person were unconscious.

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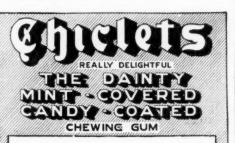
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### Victor from Vanquished Issues

Continued from Page 19.

an unwise thing. I do not wish for a moment to speak slightingly of the ministry, or of your church. I respect both; and, moreover, I am aware that you doubtless regard the matter from a standpoint totally different from mine. But still I repeat that I think you are making a mistake. Speaking without any desire to flatter, you must yourself be aware that you possess unusual ability. A dozen careers are possible to you, and any one of them successful and probably brilliant. In the pulpit of the Methodist Church, with its circuit system, your talents will be, to a great extent, wasted; you will have a life of hard work which may perhaps bring you in the end a D.D., a reputation for scholarly and eloquent sermons, and a certain precedence and authority among men of the cloth. Surely your ambition reaches higher than that! other career there is no position to which you might not aspire, no reward you might not expect to win."

Was it Stephen's fancy or did the older man consciously emphasize that last sentence? There was a pause, during which Mr. Allen drummed with his fingers on the polished table, and the low, sweet laughter of women, mingled with the tinkle of the zither, drifted through the hall. Stephen could find no reply to make, and presently the smooth, bland voice went on:

"Perhaps you have already thought this over. If so, I hope you will decide the question in a practical manner. There are plenty of men who will do your work in the church as well as you can, but few who can do your work in the world. Don't let any sentimental aim or enthusiasm stand in your way. Christianity is not confined to the ministry. I hope you are not annoyed with me for my plain speaking. I have spoken to you as a father to a son whose best interests he has at heart. If you decide to look about you for some other profession you can rely on me for advice and any assistance it may be in my power to offer you."

"Thank you," said Stephen hurriedly. "What you say may be true, Mr. Allen. I have been thinking over this matter a good deal of late. But just at present I cannot decide."

Mr. Allen rose, with the air of closing an interview.

"Of, course, of course," he said briskly. "I understand your perplexity perfectly. You are young and the young are apt to have ideals. I am old and I know what I am talking about. I want you to make the best of yourself."

When he had gone out Stephen rose and began to pace up and down the room. He was full of feverish disquiet. Judith's name had not been mentioned in the conversation, nor had any reference been made to her. Yet, stripped of all its conventional swathing, the central, electrical idea had been, as plainly as if Gerard



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153

Allen had put it into words: "Give up this foolish idea of becoming a circuit-ridden Methodist minister and you will win the woman you love.

The thought was insistent. Moreover, the stirring of a worldly ambition he had once fought and deemed conquered had awakened into ten-fold strength under Gerard Allen's astute appeal. His chosen lot appeared to him all that the older man had represented it-hard, unpromising, bare of fruition. A hundred voices seemed to call him from it.

Into this strife and chaos of thought came Judith, soft-footed, through the hall, pausing for a moment in the doorway. Even in the dusk Stephen could see the ivory outlines of her face against the

crimson hangings.
"All alone? Where is father?"

"He went out a few minutes ago," said Stephen, turning away from the window that looked out on the purple-brimmed Lynndale valley.

Judith came over and stood beside him. The froth-like ruffles of her white gown brushed against his arm. In spite of himself the young man could not repress a

The girl at his side started. "Mr. St. John, are you ill?"

"No," Stephen turned and faced her desperately. "I have been talking to your father, Judith, and I have realized that I ought not to come here any more."

Why not?

"Because I love you."

He spoke the words through his teeth. Judith looked up at him; he was a little the taller, and the two made a beautiful, unconscious picture as they stood in the

faint, crocus light of the high window.
"I think," she said slowly, "that that would be all the more reason why you should come.'

Stephen took one step forward and then back again.

"Judith, you must understand. I love you, but I cannot ask you to share my way of life. It is too widely different from

"Is your way of life irrevocably chosen?"

Judith asked the question calmly, but her clasped hands trembled.

Stephen braced himself for the struggle. His voice was hoarse from pain as he answered.

"We were discussing that before you came in-your father and I. He advised me to give up my intention of entering the ministry and choose some other profession.

Judith drew a quick breath.

"I know father thinks it would be much better for you. He has often said so. And

you—?"
"I could not decide. I have not decided. Will it—can it—make any difference to you, Judith?"

"All the difference in the world," she answered simply. "I love you."

Stephen's arms were about her and his lips on hers. For a moment they stood so, forgetful of everything but each other. Then Judith drew herself away.

"But it is as father says, Stephen. cannot marry a Methodist minister. Think how absurd it would be. You will give it up for my sake, will you not?"

Stephen leaned against the wall, trembling from head to foot. His moment of unutterable happiness had passed, and the question of his conscience was before him again.

"Judith, could you love me if I were a traitor and a coward? For that is what I shall be if I give up the work to which, as I truly believe, I am called of God?"

Judith made a quick, half-petulant movement with her hand. "I do not understand you. You could never be those things. Is there only one calling in which a man can serve God?"

ha

"Only one for some," returned Stephen more firmly. "We do not see this question from the same standpoint, Judith. I fear I cannot make you realize mine. You will think me either a fool or a fanatic. As I have told you, I believe that I am called of God to the ministry of the Methodist Church, that there is a work in it for me to do, and that, if I give it up, I will be committing a deadly sin against my own soul—yea, and against yours as well. Can I do this even for you, Judith?"

"I certainly do not understand you," her voice was cold and had taken on a subtle aloofness. "I think your meaning is that you love your 'calling,' as you phrase it, better than you love me. Well, it is for you to choose between the two."

She turned proudly away; then, as quickly turned and came back to him.

"I cannot leave you so, Stephen. I cannot believe that this is your final decision-that you hold my love so lightly. Think the matter over calmly. This is Thursday; come back to me on Saturday and tell me that you will take father's advice; and then-

She did not conclude the sentence in words, but Stephen was conscious of a soft, warm touch on his cheek, a flutter of white draperies moving across the dim room, the dying away of light footsteps in the hall. Like a man in a dream he went out. Judith's parting kiss burned his cheek, the knowledge that she loved him seemed to course through heart and brain like fire. Even at that moment he felt that he could never give her up-that she had won even when she seemed to lose. He was hers and she was his forever, no matter what creeds or systems stood in the way.

For the next twenty-four hours Stephen fought his losing battle well and bravely. When he went to his little weekly prayer meeting on Friday night the struggle was over; Judith and love had conquered, as he had known they must. He would go the next evening and tell her so.

He felt an almost boyish exhilaration of spirits after his decision. The future opened before him, rosy with promise. He would accomplish great things. Gerard Allen was right—there was something better in life for him than a toiling, underpaid itineracy in the Methodist conference.

The sun was setting as he went up the hill. Before him a young couple, quite unconscious of his proximity, were loitering along on their way to prayer meeting. He was a hired boy from West Lynndale; she was a girl from the lobster factory and she wore an impossible hat. But they loved each other, and Stephen did not see the slouching gait or the loud finery; he saw only the love and felt a thrill of joyous sympathy with them. Old Dan Warfield was a little further ahead, hobbling painfully along and talking to himself about the Bible lesson for the night. Stephen felt amused at him. Yet he remembered with a strange pang that when he had first come to Lynndale a half-hour's talk with old Dan had seemed like a veritable bit of heavenly communion and had made him stronger and better for days afterward.

In the dim little church vestry so few people had yet assembled that the janitor had not lighted the lamps. Stephen passed absent-mindedly up to the platform and sat down on the chair by his desk, leaning his head against the frame of the open

window behind him.

It was a gracious evening; down in the valley lights were twinkling out, and above them some early stars were shining in the crystal-clear sky; a sleepy bird, somewhere in the firs behind the church, chirped out and was answered by its mate. Stephen's heart thrilled to the sound and its teaching. Everything in nature had its mate and a right to it. Judith was his and there was no law that ought to override that fact.

The vestry filled gradually, and presently the janitor lighted the lamps, shutting out the sweet golden dusk. Stephen brought himself back to the dingy little room and its rows of dull or inattentive faces with an effort. As was his custom, he read the Bible lesson and then threw the meeting open. Eliza Dillman was the first to rise. Stephen could have repeated every word of her exhortation beforehand, for it never varied from its set, conventional phrases. Then a pale woman, with a saintly face, spoke a few simple, wellchosen words. A timid young girl in the back of the room recited a hymn verse, her voice trembling with nervousness. Several other men and women followed, with prayers and testimonies of the usual crude nature.

After a long pause old Dan Warfield arose in the shadowy corner where he had been sitting. Old Dan did not often speak in meeting, but when he did the mantle of prophecy seemed to fall on him and he spoke as one inspired. He was a poor man from West Lynndale and was commonly supposed to have a closer walk with God than any other person on the circuit, not even excepting the minister himself. The older people exulted in his mystical utterances and the young were awed by them. He never confined himself to the Bible lesson for the night, but selected some seemingly random verse of Scripture and enlarged disjointedly on it. In his selections he believed himself to be guided by divine inspiration.

To-night, as he rose, his dwarfed, crooked body seemed to dilate and become imposing. The long locks of white hair falling around his face gave him a patriarchal aspect. His deep-set eyes flashed fire and seemed to be directed full upon the young minister. He lifted one bony hand above his head and shook it warningly as he exclaimed:

"He that loveth father or mother more than Me is not worthy of Me; and he that loveth son or daughter more than Me is not worthy of Me; and he that taketh not his cross and followeth after Me is not worthy of me."



# From That to This In Cooking

#### How Puffed Wheat and Rice Evolved

Even the ancients—even barbarians—knew that grain must be cooked in some way. They boiled it or parched it or baked it. Modern peoples improved their methods, but little improved their results.

The effect, both in ancient times and modern, was to break up part of the food cells. Only a part. The rest were left unbroken, as in raw grain.

#### Then Came Efficiency

Then men awoke to efficiency, which means eliminating waste. In

every line, things always done in half-ways were done better.

Prof. A. P. Anderson, then of Columbia University, applied efficiency to cooking. He said, "There must be some way to make all the grain food cells digestible."

And he found it. He found a way to explode each cell by turning its moisture to steam.

The process is long and heroic. It involves fearful heat. The grain must be shot from guns. But the result is Puffed Wheat and Puffed Rice—grains eight times normal size—with every food cell literally blasted to pieces for easy, complete digestion.

### Puffed Wheat, 12c Puffed Rice, 15c

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These foods mark the limit in cookery. But their enticements alone have won millions. These are bubbles of grain—crisp, airy and toasted. Almost as fragile as snowflakes. With a taste like toasted nuts.

They are food confections. Serve them with sugar and cream, mix them with fruit, float them in your bowls of milk. Use in candy making or as garnish for ice cream. Let hungry children eat them dry like peanuts.

But always remember that they easily digest, and that every atom feeds. These are perfect all-hour



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Stephen felt as if a mortal pang had gone through him, piercing even to the dividing asunder of soul and spirit. He turned his startled eyes on the old man, who, unheeding anyone, went on with his exhortation, crude, ungrammatical, even ludicrous in some aspects, but full of a power that could be felt, mingling his own appeals with texts from Holy Writ—"If thy right eye offend thee pluck it out and cast it from thee"; "No man can serve two masters"; "Turn ye, turn ye, saith the Lord," and every word seemed to Stephen St. John to be meant for him alone.

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Old Dan's impassioned utterances lasted but a few minutes. He dropped back into his seat exhausted and an audible sigh of relief went through the room, where the people had been listening as to the voice of judgment. Nobody would presume to speak after old Dan, and the conscience-stricken minister came to himself, realizing that he was expected to close the meeting with his usual short address.

This, just then, was impossible to him. He rose to pronounce the benediction with so white a face that his hearers thought he must be ill. When the meeting was dismissed he walked blindly out and home in all agony of renunciation.

Stephen St. John did not go to Glenwood the next evening, but on Sunday night he preached a sermon from old Dan's text that is remembered and talked of yet on the Methodist circuit of Lynndale

Judith was there, coming in late with the Blakeleys. He had not expected this and it was a shock to him, but he did not falter. Judith went down the aisle after the service without waiting to speak to him; there was a strange expression on her pale face; Stephen felt that she understood what his decision had been. He was not yet lifted above the agony of that decision, but there was a peace in his soul that not all his pain could embitter. By the grace of God he had come off conqueror.

Three days later Judith Allen came to him as he stood at dusk by the little garden gate of his boarding house. He did not see her until she was close by him and at first he could find no words to greet her.

Judith put her hand on the gate. "Won't you let me in, Stephen?"

He opened the gate and stepped aside like one in a dream. Judith came close up to him.

to him.

"You have put me to the shame of seeking you," she said steadily. "I came because I feared you would not come to me, even if I sent for you, and I—I could not bear it any longer. What did that dreadful sermon of yours mean, Stephen? That you had given me up?"

"Yes, Judith. I could do nothing else. I love you—God knows how deeply—but my way of life can never be one with yours."

"And so-"

Her voice was questioning. His in reply was grave and sad.

"We must part."

"Oh, no! I must turn Methodist and renounce the pomps and vanities of the world. Do you think I shall ever develop into a passably good minister's wife, Stephen?" "Judith!"

At the pain in his voice her face lost its half-arch, half-teasing expression. She put her hand on his arm.

"Stephen, did you think I could give you up? When two strong-willed people like you and me clash there is nothing to do but for one to yield as gracefully as may be. Since you would not, why, I must. When I realized what your decision had been I was angry and hurt at first. But afterward I tried to look at the matter from your standpoint, and I think I succeeded. You were right, and I honor you for it. But now-"

She held out her hands to him. He trembled as he took them in an earnest clasp.

"Judith, dear one, it is not right, I fear, to accept such a sacrifice from you. And your father-"

"He will be disappointed, Stephen, but his disappointment will not go to the length of destroying my happiness. His regard for you would weather a worse gale than this, I think. And as for 'sacrifice,' there is no question of that from me to you. I cannot live without you, and you will have to teach me so much, dear, before I can be of any help to you at all."

Stephen gathered her closely to him. His voice was reverent as he said:

"Judith, do you realize all that you are giving up?'

"For Stephen St. John's love? Yes, and the balance is all in your favor."

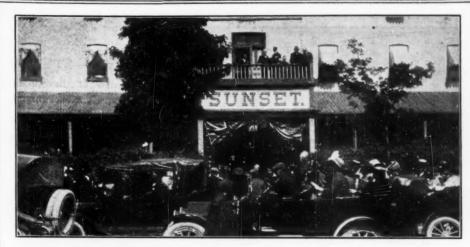
She turned and laid her cheek against his. Very softly and earnestly she repeated:

"Whither thou goest, I will go; thy people shall be my people and thy God my God; where thou diest I will die and there shall I be buried; the Lord do so to me and more also if aught but death part thee and me."

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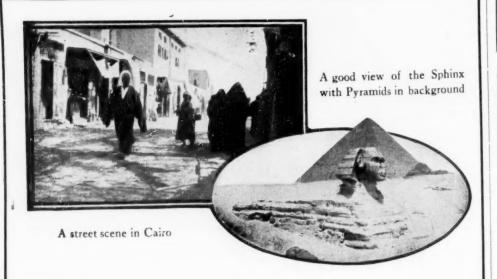
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# MACLEAN'S MAGAZINE

143-153 UNIVERSITY AVENUE, TORONTO, ONTARIO

#### Robert Campbell

Continued from Page 28.

determined to press on despite the prospect of starvation and attack from hostile forces, gave permission to his two young Indian servants to turn back with some who were leaving; but the two lads said they would not part from him. And one could not but think of the two negro lads who accompanied Livingstone to the end with such heroic devotion. Once this parallel came to mind it was easy to see the other points of resemblance between these two noted pathfinders.

In 1838 Campbell, striking north-westward, established a trading post at Dease Lake, one of the sources of the Liard River, a tributary of the McKenzie. On this expedition he passed over to the Stickine River in the "Cassiar" gold fields of British Columbia. He had trouble with Coast Indians, who took him prisoner; but he escaped and, having crossed the Indian Bridge, chopped it down so that they could not follow. He then traced the Liard River to its source, Lake Francis, and established a post there. He pushed over the height of land and discovered the Pelly River where he built another post. In 1840 he traced another branch of the Liard to a lake which he named Lake Finlayson. In 1843 he re-crossed the mountains and followed the Pelly River which he had discovered and proved it to be identical with the Yukon. Fort Selkirk was there established and he went on to Fort Yukon some seven hundred miles more. He then ascended the Porcupine River and crossed over to the Peel River, a branch of the McKenzie. In 1848 he went down the Pelly by canoe to the junction of the Lewis from whence the river takes the name of the Yukon.

When Campbell began this exploration work in 1834 and essayed the difficult and dangerous task of crossing from the Mc-Kenzie River district to get into touch with the Pacific, he found that few even of the hardiest cared to accompany him. In fact his first efforts were checked by the fears of his men and he had to return to Fort Liard and refit his little expedition. There he told his men that the trip simply had to be made and that any man who mutinied would do so at his peril. And at the Devil's Portage, which he says was well named, he had to quell incipient trouble by a display of his own physical force and determination. During one winter on his way to Dease Lake he stayed at Fort Halkett, and took special pains as a former experimental farm director, to investigate the agricultural possibilities of the region which he pronounced wonderful. It has taken a long time for us to understand the greatness of the heritage we have in that country around the Peace and McKenzie where there is room for millions of prosperous settlers-but as we look on it now being gridironed with railways let us not forget the man who blazed

Campbell's objective, as we say, was Lake Dease on his way to the coast and on the road there he came to the Stikine the In of the Campl some f leaving for w afterw ing Ca learni into th him. wrote and d cumst and C them

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River where he found a swaying, swinging bridge that had been erected by the Indians of the Nahanie tribe. The bridge looked like a good place to commit certain suicide on for it seemed unlikely that anything less agile than a cat would get over it. But Campbell wanted some food for his men and, seeing tents on the other side, crossed somehow and found the camp desolate as the Indians fled at the uncanny approach of the first white man some of them had ever seen. However, there was food and Campbell, having partaken, bundled up some for his men and recrossed the bridge, leaving beads and other presents to pay for what he had appropriated. Shortly afterwards the chief of the Nahanies, finding Campbell's presents in the camp and learning therefrom that the explorer was friendly and fair, came over to warn the white man that Shakes, the big chief of all the Indians, would resent his coming into the country and would surely murder him. Of this friendly chief, Campbell wrote: "He says that he loved my blood and did not wish to see it spilled." Circumstances were now very threatening and Campbell sent back his men telling them to wait at a certain point for two days and if he did not appear they could return to their homes as he might be killed. It was at this point that the two Indian lads refused to leave their leader.

So Campbell went on into the camp of the redoubtable Shakes. Shakes had a huge camp of many hundreds of Indians but Campbell was nothing daunted. He met the great chief and went to his tent for conference. But the friendly Indians pulled down the tent as if by accident so as to prevent the murder they feared. Campbell was armed with a percussion gun, the Indians had only some flint-locks. Shakes wanted the explorer to fire off the gun but Campbell said, "I would only fire one barrel and even then I had the powder and ball to reload at once." The dauntless bearing of the explorer quelled the courage of the big chief, and Campbell and his Indian lads went on. They ran the river in a canoe which was tossed like a cork on the mountain stream. A rock struck and a leak sprung but just then they hit a tree to which they clung. The tree was the rare one with pitch to mend the boat and Campbell looked on the circumstance as Providential and continued the journey.

It was on this journey that he met the famous chieftainess of the Nahanies, a very striking looking woman, who had never seen a white man. She was much impressed by Campbell's evident courage and kindness and being the wife of a chief was able to be of assistance to him in hours of danger. All that winter of 1838 there was the utmost scarcity of food and the Indians at one time made a rush at Campbell to end his life as they felt his presence to be connected with the famine. But the chieftainess also rushed in, with flashing eyes and burning anger and drove back the assassin band. Later on in her absence other unfriendly Indians came with threatening gestures and Campbell said quickly to his servant, "I have heard it said that a ball passing through one's body feels like an icicle: we will soon know by the looks of things."

Telling of this incident, Campbell says, "I opened my Bible and the first words I

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saw were those of the Lord to Joshua, 'Be strong and of good courage. Have not I commanded thee; be not thou afraid neither be thou dismayed for the Lord thy God is with thee whithersoever thou goest." He says he felt no fear and the hostile Indians seeing his calmness and his shining face grew afraid, saying afterwards that he was talking to the Great Spirit in the book and that they feared to touch him.

That winter they all subsisted with great difficulty, and in the Spring when they no longer needed their snowshoes they boiled the strings down to a sort of glue which Campbell says kept them in food for some days till they got game. As they advanced from place to place Camp-bell would mark the trees here and there with the letters "H.B.C." thus taking possession of the country in the name of the great company. Only for these mystical but effective capitals scattered all over by the company's frontiers-men it is quite certain that the area now under the British flag on this continent would be vastly smaller than it is. This service to the Empire must not be forgotten.

During the winter of 1849 Campbell met with the Chilcat Indians from the coast and through them got into touch with the captain of the Beaver, the famous old boat that did duty for the company along the Pacific shore. So that Campbell as Governor Simpson had expected had pushed the company's trade across

the mountains to the sea.

In passing we think it worthy of special comment that this eager explorer made it a fixed rule throughout all his tremendous journeyings that he and those with him should rest on Sunday. And he says he proved that men who take the one day's rest in seven according to the commandment, accomplish more work and last longer than those who rush on unresting throughout all the days of the week. This testimony is worth recording for these days of mad eagerness in business and pleasure.

In 1852 Campbell, having finished his great work of exploration started his famous journey from the Yukon to the Old Land. He left White River near the Alaska boundary on September 6th, went up the Pelly, crossed the mountains to the Liard, on to Fort Simpson; thence he started on snowshoes for Crow Wing, on the Mississippi. He had with him three men and a train of dogs. His course lay by Great Slave Lake, Lake Athabasca, Ile à la Crosse, Carlton House, Fort Pelly, Fort Garry and Pembina. In March he reached Crow Wing, where he got horses for the journey to Chicago. From Chicago he went by Montreal and reported at the Hudson Bay House in London, England. on April 18th. From his starting point on the Yukon, Campbell had made a continuous journey of about 10,000 miles, nearly half of which was through an uninhabited wilderness and of this, three thousand miles was passed over in the dead of winter on snowshoes. In these days of Pullman cars over mountain and plain we may well be ashamed of ourselves if we speak of being wearied with iourneying. But then we have not all the frame and the constitution and the determination of the Perthshire shepherd lad.

After over forty years of service with the great company, Mr. Campbell retired and removed to a quiet farm in Manitoba where he lived, a great favorite with the community, until his death about ten years ago. His dust reposes in the historic cemetery at Kildonan where, amongst the earliest Scottish pioneers of the West he has a fitting resting place. With those famous Selkirk Settlers he had become acquainted when he first came as a shepherd lad to begin what turned out to be an illustrious career. With all his remarkable achievements he had remained simple and unostentatious in his manner of life, and it is because with extreme modesty he absolutely refused to have his name attached to any of the places he discovered that the record of his life must be perpetuated in articles like these. Only that we must respect his own expressed wishes we would, even at this date, advocate changing the name of the Yukon to the Campbell River. Then the name of this famous explorer and noble man would be put on the face of the visible world along with Fraser and Mackenzie and the rest of the pathfinders of our Western Empire.

#### The Forests and the Fire-Thief

Continued from Page 23.

into the bonfire for every 3 we used in lumber. Of the original virgin forest of this country half has been destroyed by fire. What has disappeared in this easily preventible form, on the low valuation basis of 50 cents per thousand feet, board measure, would have yielded a direct revenue of more than one billion dollars, not to mention the other benefits resulting from its utilization.

THE devastations caused by fire are often mere introduction to a still worse form of forest ruin. In many cases where the younger trees, the hope of the family future, are ruined by flames, the trees of large diameter are still fit for lumber. But in the wake of large fires come the wood-boring beetles. Their larvæ penetrate to the heart of the timber, boring long tunnels and rendering it unfit for lumber. The beetle is the great cleanup agent. What fire misses, it gets. In a single year these "insignificant" forest pests render a bill to the lumber consumer and the nation for fully fifty million dol-

Fire carries the brand of the true bully. He bulks heavy on the weakness of his adversaries. A show of muscle puts him to flight; witness the practical immunity of European forests from bad conflagrations, witness the success thus far attained in our own country where resoluteness has played a part. The French or Swiss fire ranger of this day hardly knows what a destructive blaze looks like. He adapts to the wooded areas the protective principles of a respectable village. Highways and trails are cut through and through for quick transportation of fire milli ing lions pros inex the agai star ting Thr sorr are one pro met

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fighters, as also to block the path of the flames. Look-out towers proclaim to the watcher instantly the location of incipient trouble, and telephone lines enable him to summon assistants armed with shovels and canvas buckets. Few will say that Europe's forest protection is exactly comparable to Canada's. Certainly the need for generous expenditure, organization, foresight, on the part of a French or Swiss government applies equally to this

To find the way to beat the fire-thief we must first take his measure, know his arm reach, and study his fighting style. Some lumbermen state, with innocent hyperbole, that "practically all forest fires are kindled by railways." There are some railway men who profess to believe that locomotives start very few fires but get blamed for damage of the lumberman's doing. The truth lies at a way-station between these extreme assertions. Human agency is responsible in practically all cases, the exceptions being lightning, an occasional meteor and, perhaps, a few instances of the combination of dried leaves or cones and the heating effect of a broken bottle in the sunlight. The thing called Man, is, by all means, the prime and untiring sinner. He sets the forests afire, and it is his voluntary mischief-making that steals from the Canadian people properties which our grandchildren will pay for at so much a log.

The causes of forest fires are multiform. Railway smoke stacks and ash pans and construction gangs have burned down millions of acres of timber. Settlers, clearing up their farms, have sent more millions into limbo. Campers, surveyors, prospectors, and others of the itinerant class, share a guilt particularly deep and inexcusable. River drivers, working along the timber streams, have been convicted again and again of wanton conduct in starting destruction from their unextinguished camp fires, pipe ashes, etc. Threshing engines, logging engines are sorry partners in forest protection. Such are some of the commoner causes to which the mark of guilt can be attached. Every one of them, the reader will notice, is the product of human ignorance, selfishness, or carelessness. These things must be met by education and the whip of law.

That forest fires spread by leaping from canopy to canopy is an impression quite common and quite wrong. "Top fires" are indeed well known to rangers and constitute the most baffling kind of trouble, but in most instances the flames progress by means of cones, dried leaves and débris littering the ground. Where there is comparatively clean ground, as in the virgin forest or where the *débris* has been properly disposed of, fire dies for want of nourishment. Back of the railway smokestacks, the settler's clearing, campers' cigarettes, we understand immediately that while a hundred causes start the fire, the untidy floor of the forest must answer for its progress and the damage that passes estimation.

This brings us to what is perhaps the chief problem of Canadian forest management so far as concerns fire protection-the working out of a safe and financially practicable method in disposing of débris. The present practice of tree slaughter by most lumbermen is admitted-



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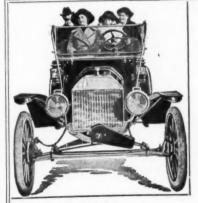
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ly not economical or safe. When trees are felled the branches and tops are chopped off and the trunk sawn into logs for immediate removal. In the wake of the cutting gangs, therefore, we find a mass of large and small branches, with their cluster of leaves, which in the course of a season or two becomes ideal kindling. Were these branches closely lopped so that they lay against the surface of the earth, subject to moisture and disintegration, a few years would make them proof to fire. Raised by the branches above the ground they retain an inflammability unimpaired for ten or twenty or even more years, prepared at any moment to supply fuel to vagrant sparks. No forest manager disputes the tremendous contribution of lumbermen's "slash" to the annual destruction of our woodlands. In Europe and some parts of the United States, usually under Governmental auspices, this "slash" peril has been either wholly removed or greatly modified by one of the methods of piling and burning, scattering the litter broadcast, or a combination of plans gauged by local circumstances and the factor of expense. Experiments are now under way in several parts of the Dominion to ascertain just what additional expense these "slash" handling precautions entail. One fact needs no experimentation or delay. The fire loss induced by the presence of logging litter makes almost any precautionary expense a trifling incident in a Government's balance sheet. If it could be decided by any of the provincial Governments that "slash" must be disposed of in some way the expense of so doing can quite simply be adjusted when establishing the lumberman's purchase price at the time he secures his limit or renews his leasing privileges.

Coming back to the wise dictum: "The forests are not the property of those living to-day.... but of those who have passed away and those who are yet to be born," an observer of some of the Governmental hesitancy in some parts of the Dominion must be forced to conclude that we have precious little regard for those who have gone and only a nibble of generosity for those to come. The dead man and the unborn baby do not vote.

I N the category of forest fire losses, given here with as much cheering emphasis as possible, the writer must not convey an impression that Canadian Governments and lumber companies are sitting by as acquiescent spectators. It would be far nearer the truth to say that protective machinery has developed as fast as has an intelligent public sentiment. The driving power towards an adequate forest guardianship must come from those Canadians who are awake. Meanwhile, all the provinces have made a beginning. Ontario spends about a quarter of a million dollars annually on fire ranging alone and about two years ago had as many as nine hundred men on this effective kind of work. Dominion and provincial Governments contribute a million dollars a year in protective service and limit-holders and railways provide half a million more. So large is the undertaking and so extremely valuable the prize that these amounts must soon be doubled and doubled again if the annual ruin is to be met half way.

We have in Quebec province two mutual associations of limit-holders with large and capable staffs devoted to the one task of forest protection; this mutual movement is likely to spread to all timbered areas of the Dominion under lease. The Board of Railway Commissioners has created splendid regulations and strongly enforced them to stop the mischievous work of locomotives and construction gangs in wooded districts. The railway companies themselves, realizing the identity of living forests and freight traffic are coming into hearty co-operation with the general movement for sane use of this great natural resource. The educational influence of the many trained foresters now employed in the country and the precept and example of the federal provincial forest services have had an effect incalculably great. The lumber men of the country, as testified by the action of their leaders, are accepting the propaganda for forest protection with cordiality. These are signs of the new public interest and the changed belief in respect to saving and using an indispensable money-making possession.

#### Heads and Heels

Continued from Page 26.

"Why can't I hang him?" he asked coldly. "This is not a saint's day."

"No, but there's no one to hang."

"You, you--" spluttered Vair, and then his face softened. "What do you mean? Has Crossin escaped?"

"No, he hasn't escaped," drawled Stub.
"He's dead."

Instantly the sheriff was the stern officer of the law.

"Why didn't you tell me Crossin was dead! And how did he die?" he demanded of a hastily summoned deputy.

of a hastily summoned deputy.
"Dead! He's no more dead than you are, or wasn't when I saw him in his cell ten minutes ago."

"What does this mean?" demanded the infuriated sheriff, turning to the still smiling Stub. "Where did you hear it?"

"You told me."

"I! You—'

Vair held himself in his chair by gripping the desk.

"You said the warrant had come, and according to it and the law, Hen is dead, was hanged yesterday," Stub went on. "You can't hang the fellow in the jail. The man condemned for killing Cadoo is legally dead and you can't hang another man in his place. If you don't believe me, ask the prosecutor and the judge."

Stub arose stiffly and limped out of the office. Vair forgot his amazement when he saw the limp, and a look of understanding came into his face.

THAT afternoon all Selkirk had the news. And immediately the delay of the mail became of sudden interest. The mail man and his driver were smothered with questions, which served only to add to their excitement and increase their descriptions of the evil spirits which had

seized their camp when only two days from Fort Selkirk.

It was finally understood that the men themselves had slept for nearly two days and that after their own awakening and a great nausea, they could not arouse the dogs for another day. Stub was questioned by the sheriff. Vair was stern, but admiration was hidden beneath his attitude toward the little man who so innocently answered his questions and so plausibly explained his absence. He was dismissed in disgust.

Old timers now accepted Stub as one of them. They had begrudgingly given him credit for the first hanging fiasco but in accomplishing this second delay he had shown that courage and ability to travel the trail had been combined with ingenuity to prevent the execution of his partner. For all Selkirk knew that Stub Rayley and not evil spirits was responsi-ble for the "long sleep" of the mail drivers.

On Feb. 18, Crossin was again taken before the judge. For the third time he was sentenced to be hanged. Judge, sheriff and prosecutor wished no further burlesque, and to permit the certain arrival of the death warrant the execution

was set for August 1.

Spring came and, with the going out of the ice, Stub's hopes vanished. Bob Bruns had been gone more than a year. Somewhere in that great wilderness to the north and west the sun was melting the snow that covered his body. He must be dead. Alive, he would have returned before the winter ended, would have returned with the witness, would at least have sent word. Bob had given his life for his friend. Stub was the more despondent because he could not.

B UT he was on the bank when the first boat arrived from down river, and the first man to step ashore was Bob Bruns. He carried his head a little stiffly and the upturned collar of his shirt scarcely concealed a newly healed wound. Beside him was a slinking, furtive figure that shivered as he saw the soldiers on the

Stub waited until Bob had shoved a way for himself and Sheets through the crowd. He was about to make one of the taunting remarks he invariably directed at the big fellow when he saw the expression of trust and confidence in Bob's face.

"Good work, Bruin," was his greeting.
"You did well, and there's more than a month to spare. We'll turn this fellow over to the sheriff and then tell Hen. I imagine he'll be glad you're back. I've got the prosecutor talked into believing there might be something in my theory that the old girl's bandage slipped and that she got a squint at what's wrong with her scales."

Bob Bruns grunted, as he always did when he did not understand what Stub was talking about.

"I got him," was all he said.

"Where's Snellgrove?" asked Stub, picturing what the fifteen months of pursuit must have been.

"Had to kill him to get this one down

And that was all Stub or Hen ever learned of the long chase, even when all three were alone on their way up the Stewart in August.

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## The Last Ally

Continued from Page 34.

CHAPTER XIV.

#### Take Larescu

THE hill people of Ironia were counted as giants; and their leader, Take Larescu, was a giant among them. He stood fully six-foot-four, with the proportions generally of a grizzly bear. His head, carried at a dignified elevation, was covered with a red cap, closely approximating the Turkish fez in shape and allowing a mop of curly black hair to protrude all around. If in his physical make-up he resembled the bear, his face was a close approach to the fierce and noble lines of the eagle. With bold, commanding eye, heavy, hooked nose, and long black moustache, he gave more than a suggestion of imperturbable dignity and highreaching ambition, while the general expression of his face showed determination, ruthless strength and cruelty. He was dressed in the usual costume of the Ironian, with broad white trousers and many-colored blouse, and carried a brace of pistols in his belt. An incongruous touch was lent by an ornate scarab watch fob which dangled from his belt between the ivory-mounted pistols. If one cared to inspect this mountainous figure of a man in detail, further incongruities were brought to light in the heavy European boots and the knitted undergarment which showed beneath his voluminous sleeves.

Take Larescu stood on the side of a precipitous hill and watched a file of men slowly winding their way up toward him. His keen eye had already noted that the approaching party included two strangers, who from their clothing were quite apparently foreigners. The leader of the hill tribes did not waste much time in fruitless speculation as to the probable identity of the two newcomers but, feeling in the loose folds of his scarlet sash, produced a decidely modern-looking pair of field-glasses. Focusing them on the distant figures of the men toiling up the hill, he studied them intently for a few minutes. "Both Americans," was his mentally registered verdict as he closed the glasses and carefully replaced them in the ample store-room of his belt. Then from the belt he produced a cigarette and match and later still, an amber mouthpiece. The capacity of Larescu's sash was a constant source of wonder to those who came in contact with him. One could not help speculating as to what he would produce

The path up which the approaching party laboriously climbed brought them to the crest of the opposing slope, which was connected with the steep eminence on which he stood by a causeway formed by the fallen trunk of a huge tree. Hidden in the dense wood behind him, a handful of men could have held this position against an army. Moving with the apparent leisure of extreme ponderosity, Larescu took up his position at the end of the causeway, a formidable Horatius

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capable of holding the bridge against any odds. His new position was not taken for purposes of defence, however. In a booming voice he called out a gruff but hearty

studied the two strangers Larescu closely as they stepped cautiously across the fallen tree trunk. One was a tall. broad-shouldered young man, with an unhatted shock of fair hair. A blood-stained rag bound around his head indicated that this member of the party had met with an accident. The other stranger was shorter and broader, with a free and careless air, a much-freckled face and a mop of flaming red hair. They in turn studied Take Larescu with an even greater degree of interest than he had shown in his inspection of them.

'Observe the comic opera Hercules," whispered Crane to Fenton.

"Good morning, gentlemen," said Larescu, with cordiality and a most surprising perfection of accent. "I am indeed delighted to have you as my guests. You, sir, I regret to note have had an accident."

If the Statue of Liberty ever took upon itself to voice a message of welcome to incoming ships, the passengers would not feel a more complete degree of amazement than that which Fenton and Crane experienced on hearing this cordial message, phrased in the most perfect English, fall from the lips of this fierce and uncouthlyapparelled brigand.

"Good morning," replied Fenton, recovering himself with an effort. "Yes, I had the misfortune to make a false step at a critical part of the trail. If it hadn't been for my friend here, I would be still lying where I tumbled. Am I addressing Take Larescu?"

"You are, sir," replied the Ironian, inclining his huge bulk in a courteous bow. "You are standing at the present moment where foot of any but Ironian has never before rested. That your mission is an important one I am assured, else my people would not have seen fit to escort you here. You are doubly welcome, sirs, if you bring news."

"Shades of Chesterfield!" said Crane to himself, "this isn't real life. If the orchestra doesn't tune up for a solo by the bass lead in a second or so, I'll know that I'm dreaming!"

Fenton in the meantime was fumbling in his coat pockets for a letter that the worthy priest had given him for the ruler of the hill country. He handed it over to Larescu who immediately broke the seal and read the contents. At the conclusion he addressed them with even more cordiality than before.

"Mr. Fenton, I am glad to know you, and you too, Mr. Crane. You are just in time for breakfast. But before we sit down I shall look to your injuries, Mr. Fenton."

He led the way back through the trees for some distance until they came to a low-lying, roughly furnished house, with nothing on the outside to distinguish it from the typical Ironian abode, excepting its size. Inside, however, they found cause for fresh astonishment. The room in which they found themselves might well have belonged to an Englishman of

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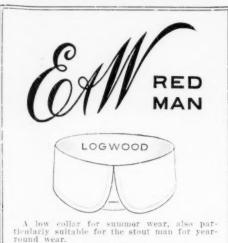
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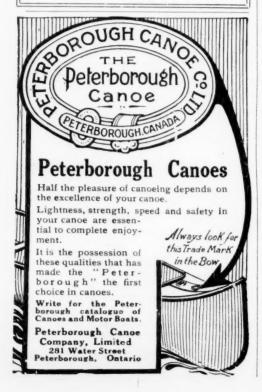


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wealth and refinement. The walls were lined with well-filled book-cases and excellent engravings. There were plenty of comfortable leather chairs: and a thick rug covered the floor. Fenton and Crane looked the surprise they felt.

"You did not think to find anything of this kind up here in the hills?" chuckled "Yet, if an abode of superthe giant. luxury could be concealed in the grottoes of Monte Carlo, why should you be surprised at finding such simple possessions as these in the mountains of Ironia? But I must not waste words while you, sir, are in such need of attention."

In another minute glasses of strong spirits had been placed before his two guests. Fenton felt a grateful warmth steal over him as he drained his glass. With an almost professional deftness, Larescu examined the injuries that Fenton had sustained in his fall and adjusted fresh bandages. "I know a little of medicine and surgery." he said, "and look after the health of my people. But now for breakfast, gentlemen."

They sat down to a meal of remarkable substantiality. backed up by really excellent coffee. Fenton ate as well as his physical condition permitted. Crane, as he put it, made up for lost time; but together they could not equal the gastronomic feats of their host. The giant finished dish after dish with the appetite of a grizzly emerging from his long winter sleep. His table manners were as finicky and perfect as his capacity was immeasurable.

During the meal, which threatened to extend well on into the forenoon, Larescu talked on a wide range of subjects, giving an insight into the unique life that he led. He had traveled considerably. Each year he quietly vanished from his hill haunts and spent two months or more in the larger cities of Western Europe. He spoke French and German, as well as English. He had studied medicine in London and Vienna, electricity in Berlin, and the art of living well in Paris. He was an omnivorous reader, and had magazines and papers brought in to him at all times of the year. He knew something of music, much of philosophy and art, and all that there was to know on the subject of the government of a primitive people. The wonder of his guests grew with each minute.

"I am telling you things about myself, of which no one in Ironia, with the exception of my personal followers, has any idea," he confided to them. "In Serajoz they know me only as the leader of the hill people-and a rather good fighting man. You are the first guests from the outside world to sit at my table; and I have told you all this, serene in the knowledge that not a word about me shall go outside this room."

They hastened to assure him that his confidence would be respected completely. Larescu then went on to tell them of his work with the hill tribes; how he made and administered their laws, adjusted all differences that arose between individuals and even on occasions officiated at the marriage rites over the tongs; for the hill people, although intensely religious in many ways, still clung to customs that marked their blood relationship to the gypsy. Finally, having completed his breakfast, Larescu shoved back his chair. His manner changed at once.
"Now for business," he said briskly,

"My reverend friend, even sharply. whose opinion I have most high regard for, has commended you to me. In what way can I be of service to you?"

Fenton hesitated a moment before replying. Divining quickly, and accurately, the reason for his guest's hesitancy, Larescu rose and, walking over to his secretary, fumbled through the contents of one of the pigeon-holes until he found a certain letter. This he placed in Fenton's hands.

"I judged from the padre's letter that your errand was in a certain sense a political one," he said. "Read this. It is from Prince Peter and will allay any uncertainties which you may have entertained with reference to my sympathies and trustworthiness."

A hasty glance through the letter convinced Fenton that not only did Larescu stand high in the regard of Prince Peter but that he had pledged himself to the cause that Peter was championing.

"You must pardon me," he said to their host, "but the fact that I have been in this country a few days only is perhaps sufficient excuse for caution. I had only the assurance of the priest of Kail Baleski as to where you stood."

He then told Larescu of what he had heard in the gardens of the royal palace on the night of the ball, of the attempts on his own life and later on that of Prince Peter, of the carrying off of the Princess Olga and finally of his own headlong pursuit. Crane who had previously known little of the object of their journey, other than the mere fact that the Princess had been abducted, hearkened to the recital with keenest interest and every evidence of excitement. The efon Take Larescu was even more marked. He listened with a scowl that darkened as fresh evidence of the perfidy of Miridoff was brought forward. At the conclusion he thumped the table with his huge fist and swore with mighty Ironian oaths that he would not leave a stone standing at Kirkalisse.

"The Duke Miridoff is a double-dyed traitor!" he declared. "For German gold he would barter his country's opportunity to regain her lost provinces. have a long score to settle with Miridoff. He has shown bitter animosity to the people of the hills. Three of my men were hanged at Serajoz ten months ago for a raid that his exactions had provoked. But now the day of reckoning has come! How is it your proverb goes-This is the last straw that causes the worm to turn!"

The lust of conflict and the primitive craving for revenge showed in every line of the gigantic chief. The veneer of civilization sloughed off. His eyes flashed, his nostrils dilated, and as he stood up his mighty arms swung menacingly, like heavy flails.

"By to-night I can have three thousand of my men before the gates of Kirkalisse!" he declared.

#### CHAPTER XV.

#### The Trump Card

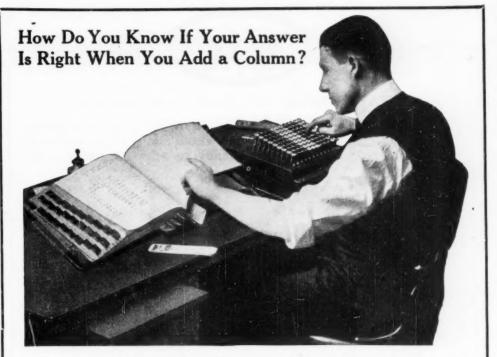
THE sun crept behind the distant mountain peak. In this country of little twilight the transition from day into night was speedy and, almost as Olga watched from her window the last rays seemed to vanish, symbol to her of the vanishing, too, of hope and the encroachment of she knew not what.

She reflected as she sat there by the window, on the events of the night before. Following her capture by a band of evil-visaged brigands, she had been convoyed through the hill country by a trail almost as difficult as that which Fenton and Crane had followed. They had arrived in the dense darkness of night at an old building perched on the crest of one of the highest peaks-apparently a disused hunting lodge. The fears of the Princess, which had increased with each hour spent on the trail, were somewhat allayed when she found there were a couple of maids in the lodge. But while that was comforting in one way, the fact that they evidently knew and respected her rank proved to her that it was no band of mountain marauders who had carried her off. The girls were not gypsies. Her first thought that she would be held for a ransom was replaced by a feeling of vague uncertainty.

The lodge had not been used for some time, although several of the rooms had been hastily furnished; furnished too with a certain degree of elegance. This was an added circumstance which provided the Princess with scope for uneasy speculation as to her present position and the likely developments of the future. In a vague way she began to realize the motive behind her abduction.

Any doubts that may have lingered had vanished at noon that day with the arrival of a young woman who rode up a wide path around the mountain side from the opposite direction to that along which the Princess had been brought. The newcomer was received with every evidence of respect by the two husky brigands who guarded the lodge. Watchfrom the window of a room on the ground floor, which had been appropriated to her as a bedroom, Olga had felt a sudden stirring of resentment when she recognized in the fair stranger the woman to whom Fenton had been so attentive - the woman, moreover, who had involved him in a restaurant brawl and for whose sake he had been pre-pared to fight a duel. If Olga were still ignorant of the real nature and the depth of her interest in the Canadian, she must surely have been astonished at the jealous promptings which took possession of her as she surreptitiously regarded the dancer through the broken shutter which rattled in the wind outside her window. The new comer undeniably was attractive.

The interview which followed between them had left the Princess in a state of mental puzzlement and doubt. Petrowa had told her a most surprising story, speaking in French for the benefit of possible eavesdroppers; a story of



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plots and counter plots in which the narrator herself appeared in a double role, ostensibly an agent of Miridoff, actually a member of the Russian Secret Service. The story seemed highly improbable and yet there was much to substantiate it—the presence of the dancer in Varden's library and her claims to having been on hand when the attempt was made to assassinate Prince Peter. And in addition there had been something about the little dancer, an air of sincerity, that had done much to impress the Princess with the veracity of her story.

As Olga sat in the gathering gloom her thoughts were occupied largely by this surprising development. If the other woman's story were true; then her relations with Fenton might easily be understood. The Princess was anxious to believe it but doubts persisted, doubts which originated in jealous consciousness of the undoubted charms of the dancer. By this time Olga frankly admitted to herself that she had been, and still was, jealous. Her jealousy was a revelation to her.

The door opened and with firm, heavy step a man entered the room. Olga turned and saw that her visitor was none other than Miridoff, himself.

There was an unmistakable change in the demeanour of the Grand Duke. He carried himself with the conscious air of a conqueror. He emanated triumph. He came, quite apparently, to dictate terms; but it was in tones of courtesy that he first addressed her.

"Your Highness," he said, bringing his heels together with a stiff military bow, "I trust that I do not intrude. There is a matter which I must discuss with you immediately, however, and I must beg your attention for a few minutes."

Beneath the man's outward show of courtesy and his arrogant air of triumph, there was something sinister and threatening. Miridoff believed in pushing any advantage mercilessly. Against an unarmed adversary he would not hesitate to use his sword. cess bred in him no magnanimity for the vanquished but rather increased his arrogance and presumption. Olga dimly realized something of the mental attitude of her adversary and for the first time the real danger of her position appealed to her certainly and clearly. She faced him, however, with no evidence of

"Am I indebted to your Grace for the way in which I have been treated; for my detention as a prisoner in this house?" she demanded.

"No," answered Miridoff. "The motive for this was purely political. By the time you are free to return to Serajoz, certain events will have happened which will make it necessary for you to subscribe to the explanation of your disappearance now generally accepted—that you were carried off by a wandering tribe of mountain gypsies. No harm can come, therefore, of perfect candor at the present moment."

To Be Continued.

# The Business Outlook

Business Men are Only Now Able to Realise How Far-reaching are the Effects of the War

By JOHN APPLETON, Editor of The Financial Post

EDITOR'S NOTE .- Mr. Appleton some months ago laid emphasis upon his statement that business in Canada would not show signs of material revival until the crop in the Canadian West was ready to cut—as the harvest there is now approaching he again emphasizes that view-meanwhile the industries of Canada are passing through an extremely trying period of quictude only ruffled by orders for war munitions—which condition, Mr. Appleton says, will be changed as soon as the proceeds of what promises to be Canada's greatest crop begin to move.

USINESS forecasting at the present juncture is an exceedingly difficult problem. In normal times it is beset with hazards; now the problem baffles those of long experience and broad knowledge. The fact is that existing conditions have no precedent: history is a doubtful guide. We cannot wonder therefore that the average individual hesitates to venture in any direction preferring to hold fast to that which is within his reach. This attitude of mind on the part of those whose usual vocation is business does not conduce to activity. For the present uncertain outlook for business and as partially explaining the timidity of capital, we are inclined to prescribe the position of the belligerent nations and the prospect of a longer war than was generally looked for.

The entry of Italy into the war does not appear to have so far brought the end of the struggle into view. A month of summer has passed but at

The Duration no point where the belliger-Of the War. ents are in close contact is

there any progress that points to a termination of the struggle. There is a heavy preponderance of population on one side, 350,000,000 against 135,000,000, as pointed out by the London Economist, and of these populations the number of men under arms for the Allies is 16,890,000 and 12,477,000 on the enemy's side, a preponderance offset by superior organization, discipline and preparation. In order to properly understand why the struggle is likely to last for some time yet, and why in consequence business men are naturally cautious as the result of such a prospect, let us add that population counts for nothing in war unless it is organized, equipped and directed so that the weight of numbers is brought to bear upon the point of contact with the enemy either at the battle front or supporting the battle front. In a circular issued by a leading New York banker, the National City, credit is given to the soldiers of all the Allies for fighting with a bravery never surpassed. Continuing it states that whatever gains are made, now on one side then on the other, are due to the massing of superior numbers and overwhelming gunfire at the point of attack. This is evidently the only way in which a decisive advantage can be won, and so far the superior organization, mobility and internal support of the German allies have enabled them to more than hold their own against their adversaries, notwithstanding that the former have been in

large degree cut off from outside while the latter have had access to the markets of the world. In truth, the German allies have had a much more ready and ample supply of equipment and munitions from their own stores and factories than the Allies have had from all the rest of the world. The strength of the enemy has been and is in economic independence, and ability to get along without the rest of the world. If he can continue to do this, his financial problems can be managed, for he will have no payments to make abroad and payments at home can be made with paper currency. The German Government has practically taken over this year's crop of food before the harvest and will supervise its distribution. It will be only an extension of this authority, already in part accomplished, for it to regulate the other industries, controlling prices and distributing the population where it will be most serviceable for the support of the nation and the army. Finance is simplified under such conditions, for a socialistic state is established, there is no need to float loans when the state directs every man, names his pay, fixes his prices, and prints the money. Loans, if issued, become only a form of compensation distributed by the state. It has not come quite to this yet, but Germany is far enough on the road to point to its probable course if there is any want of means to carry on the

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of a

Bank.

as coming from a neutral The View source and one interested very closely in the progress Neutral of the war because of its business. Banks usually are not affected in their

policy by sentimental considerations. They weigh the various causes that affect business for good or evil. For this reason we have given the aforesaid opinion with respect to the position of Germany at greater length than we would otherwise have done. It serves to show the likelihood of the war continuing for some time. How long that time will be is very difficult to state. It may be two or three years. A state organized for defence and offence as thoroughly as Germany and with natural resources ensuring a large measure of economic independence, may be relied upon to fight to the bitter end. In view of the opinion of such eminent authorities in the United States and also in view of recent statements made by our







own statesmen of the Empire speaking from London, such as Mr. David Lloyd George, Mr. Asquith, Lord Curzon and others, we may assume that the war will not end suddenly or within the course of a few months. That it will end sooner or later and that the German Empire will be be crushed we have no doubt. The very ability of the Allies to crush Germany is due to the fact that their resources are great because they have not been impoverished or wasted in the upkeep of a top-heavy military system. This made possible the investment of British capital all over the world and it is now available to build up machinery to crush the ene-mies of the Empire. British money and influence along with British fair play and respect for nationalities has won a place in the hearts of the world's people that will be a greater fortification of her existence and insurance against her defeat than all the preparations made by the German Empire. While this will be an interesting question for historians to elaborate and for which to shape a proper answer it only interests us at the present moment in so far as it affects the immediate outlook for business.

We may take it therefore that the war will last for another year or two. That fact is only just coming home to the rank and file of the business.

War to community. At the outbreak of hostilities an emi-Year or Two. nent banker expressed to

writer the opinion that the war would be short and decisive. Aircraft, gigantic guns, war vessels of unknown power and other instruments more destructive than had heretofore existed, were calculated to bring a conflict to a speedy termination. Germany's ingenuity in contriving death-dealing devices can prolong the struggle but not to an extert that will circumvent the determination inherent in British blood. Gathering her forces together, equipping them and establishing business on lines that will maintain the Imperial structure through a trying period seems now to be the chief object of the great men of the Empi.e. The manufacturer, the jobber, the retailer and professional man, and the laboring man, has to rearrange his affairs so that the best will be given to the Empire and at the same time ensure that production and trade shall proceed as near to normal as is possible.

At the moment, that is, in the beginning of July the attention of business men in Canada seems to be very largely concen-

The Position of munitions of war. No of Canada. trated upon the production of munitions of war. No doubt orders are being

given to Canadian manufacturers on a large scale and in consequence labor is being given to a very large number of men. No doubt that fact accounts for our exports of manufactured goods increasing to such large proportions compared with previous years. To illustrate this point we might state that in the month of May, 1915, the exports of manufactured goods amounted to \$16,-121,149 as compared with \$6,000,000 in 1914 and \$4,000,000 in 1913. For the first five months of the present year the exports of manufactured goods amounted to \$61,695,382 as compared with \$26,257,474

for the first five months of 1914 and \$20,-215,456 in 1913. The following table will be of interest inasmuch as it shows a striking increase we have noted and it also shows that the balance of trade in favor of Canada as against a balance on the other side of the ledger in previous years.

Manufactured Goods Exported.

	15013.	1191-4.	1910.
Jan	3,589,894	\$ 5,050,999	\$ 7,769,146
Feb	3,950,530	4,674,709	8,982,639
Mar	4,993,695	6,239,290	15,000,790
April	3,478,598	4,295,199	13,221,658
May	4,202,439	5,997.277	16,121,149
	\$20,215,456	\$26,257,474	\$61,695,382
All exports. 1		141,272,877	211,502,903
% of mftrs.	15.8	18.5	29.0
Imports	284,224,432	217,703,787	171,352,900
Balance1	43.919.006-	76.430.910	- 40,150,006

\*Per cent. of manufactures to total.

From the foregoing table it will be noted that the balance in favor of Canada for the first five months of the year was \$40,000,000, approximately. In previous years the balance was very much against Canada. How notable the change is may be better understood by reference to the foreign trade in the Dominion covering a period of years. Not since 1901 have our exports exceeded imports. For the fiscal years ending 1911, 1912, 1913 and 1914 the aggregate balance against Canada was practically \$890,000,000. It may be more readily understood if the actual figures are given. Here they are:

Year 1911									8	Exports 297,196,365	Imports. 472,247,540
1912					į.					315,317,250	559,320,54
4000										393,232,057	692,032,393
1914										178,997,928	650,746,79

\$1,484,743,600 · \$2,374,347,273 \$1,484,743,600

\$ 889,003,073

Adverse balance ....

The foregoing figures indicate with reasonable approximation the extent to which Canada was borrowing from abroad. That borrowing has now ceased and no one can say when it will be resumed. The United States has taken up some of our issues but that market will not in our opinion be such as will enable us to borrow on anything like the scale of the past decade. We are, however, not quite so dependent on borrowing as ten years ago. For production we have more machinery. Great stretches of country have been tapped by new rail lines and the produce will be available for export. It is probable therefore that we will be able to sell more than we buy for some time and this should rehabilitate our credit somewhat and enable us to get capital to further develop the Dominion.

When we consider that war has minimized the flow of capital to this country and also expenditure on public works and producing machinery, it means that many manufacturing plants will be idle until either the country saves capital of its own or until it begins to flow again to this country as freely as in the past. The Canadian Pacific, but one borrowing corporation in Canada, brought to this country no less than \$50,000,000 a year, taking five years' experience as an average. Other concerns, including the Government, obtained approximately \$175,000,000 a year. Expenditure of these sums on capital account created demands on factories and sellers-a demand gone entirely. Business men therefore have to face conditions quite new. From abroad the Dominion will not get annually approximately \$225,000,000 for new capital expenditure. Further, there is the duty of providing our share for carrying on of the war. Cessation of the movement of capital to the country stopped our industries temporarily and the war injected an uncertain element into the future thus affecting business sentimentally. One advantage was, however, derived by Canada from the war. Our

One Big
Advantage
Brought By
War.

principal industry is that of agriculture and so long as the war continues all products of the field and of the farmsteads will command a high value. We

mand a high value. state quite confidently that the advance in prices of commodities which can be supplied by Canada as the result of the war was undoubtedly, in many respects, a boon to the country. If Canadian enterprise is diverted to the farm in greater proportions and advantage taken of the high prices to prevail during the continuance of the war the aspect, economically, is far from being depressing. Just a year ago Canada was not only on the eve of a great war but on the eve of a very poor crop-an abnormally poor one. At the present juncture we are on the eve of what promises to be quite a normal crop and one which should yield at least 250,000,000 bushels of wheat or 100,000, 000 more than a year ago. The proceeds of such a crop will account for at least \$100,000,000 of the money we have hitherto been able to obtain for investment in the Dominion. That is to say the crop will bring us \$100,000,000 more than nor-

mally the country has been obtaining from its cereal Canada May crops. Canada should Expect For war continues, from the higher prices obtainable for cattle. Our attention was drawn a day or so ago to a despatch from Paris in the New York Journal of Commerce to this

The Chamber of Deputies to-day adopted a bill authorizing the Minister of War to buy in foreign countries 100,000 head of cattle on the hoof. These are in addition to the 30,000 head already bought in the United States and the 240,000 tons of refrigerator beef contracted for

the 240,000 tons of refrigerator beef contracted for.

The consumption of beef since the war began has increased, it being estimated at 36,000 tons for refugees and 250,000 tons for soldiers. The high cost of living in France was discussed during the debate on the bill, the speakers urging in particular the adoption of measures against the increased price of meat.

At the same time despatches are appearing in Canadian newspapers to the effect that a Calgary rancher sold a large herd of cattle to the French Government. These reports must be taken in conjunction with the acknowledged shortage of cattle in Canada and United States during the past year or two. In France and Germany and even Russia the slaughter of domestic cattle already must have been tremendous. These great losses will have to be repaired in the future. Meanwhile the demands are extraordinary at a time when supplies are not plentiful. With our great resources in the way of producing food for cattle, and let us add again here, our resources for producing cereals, the prolongation of the war should not seriously impair the economic position held by this country.

Sooner or later the fact that millions of men hitherto employed in producing food are now fighting and are consumers will tell. Those countries with grain or other foodstuffs to sell, will obtain high prices and Canada and the United States are two countries likely to profit most as the result of this position of affairs.

While our present duty is to supply war munitions in order to combat the enemy some thought must be given to results from such business. What

Supplying Munitions.

Profits From they will be is difficult to determine. In this connection we might quote from a statement issued by the National City Bank of Chi-

cago, and no doubt prepared by its President, Mr. David R. Forgan, a banker well known in Canada. He says that estimating the war business for the whole country (U.S.) at \$1,500,000,000 it is fair to put the profit at \$300,000,000 or 20 per cent. Such a profit, argued Mr. Forgan, appears enormous but it has to be judged in each instance with reference to the loss encountered in dismantling the plant and equipping it with expensive machinery for turning out work which it was never designed to produce. Most of the machinery will go to the scrap heap as soon as the war ends when each plant will have to be put into condition again to handle its normal business. This situation was clearly foreseen by manufacturers and in a measure provided for. But the "after effects" represented by the cost of restoring the plant and regaining the business that has to be sacrificed will be highly interesting to say the least. The business sacrifice in Canada in order to handle war munitions is not very considerable. Eminent manufacturers in Canada personally told the writer that orders are very scarce other than those for war material, and those that are being offered are appreciated.

While many manufacturers state that they are doing all they can in the way of producing war munitions a large propor-

Manufacturers and War Munitions.

tion say that they could do more and would have been able to turn orders out more profitably to themselves if they had received them earlier. There is gen-

eral dissatisfaction amongst manufacturers respecting the distribution of orders. But the fact remains that execution of orders tendered and accepted is keeping at work a very large number of men and as the result at certain manufacturing centres business is quite normal.

The return of Sir Thomas Shaughnessy from England after interviewing the war authorities and his statement that Canada will get all the orders that she can handle is reassuring. At first it was understood that Sir Thomas would be the general purchasing agent for the British Government. Later interviews, however, indicate that he will not be an agent for the purchase of shells. That business will still be looked after by the Shell Committee. It would appear therefore that Sir Thomas will place orders for the various requirements of Britain in other lines and the fact of his taking hold of it and stating that Canada will get all the orders she can handle may be taken to mean that big demands will be



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made upon the commodities we produce. Some uncertainty is infused into the situation by the visit of Sir Robert Borden following so closely upon the return of Sir Thomas Shaughnessy.

From the orders that may be expected from the Allies as a result of the influences that will be put into motion by Sir

Promise of a Record Harvest. Thomas Shaughnessy and Sir Robert Borden our factories in the next few months may be busier than they anticipated. An-

other factor will tend to stimulate new business and that is the record crop which is now promised. In Eastern Canada the wheat crop never looked so well and the promise in the West is that the crop will be an average one. Just as soon as the crop begins to move business will take on a better tone. Meanwhile every business index points to contraction. No better index exists than the earnings of our railroads. To show how great has been the contraction we give herewith a table showing the monthly gross earnings covering a period of three years.

CANADIAN PACIFIC RAILWAY.

		1914	1913	1912
July	 !	\$10,481,972	\$ 11,993,062	\$ 11,933,726
Aug.	 	9.917,764	11,062,000	11,886,000
Sept.	 	10,754,139	11,887,000	11,322,000
Oct.	 	9,282,928	14,357,000	12,960,000
Nov.	 	8,057,359	13,180,000	12,145,000
Dec.	 	7,443,962	11,695,000	12,108,000
		1915	1914	1913
Jan.	 	6,109,026	7,719,000	9,519,000
Feb.	 	6,735,678	7,367,000	9,528,000
Mar.	 	7,700,000	9,298,000	10,965,000
Apr.	 	7,455,859	9,431,000	11,478,000
May	 	7,261,495	9,533,000	11,650,000
June	 	6,990,000	9,561,000	11,187,000
			_	

\$98,190,182 \$129,814,823 \$139,395,699

		1914	1913	1912
July	 	1,594,300	1,928,800	1,829,700
Aug	 	1,367,700	1,824,800	1,745,800
	 	2,109,900	1,994,900	1.671,500
Oct		1,895,300	2,687,100	2,351,200
Nov	 	1,670,200	2,673,300	2,509,700
Dec	 	1,329,100	2,256,000	2,131,700
		1915	1914	1913
Jan	 	950,800	1,570,900	1.513.400
Feb	 	1,105,100	1,324,600	1,398,700
Mar	 	1,379,000	1,533,400	1.685,900
Apr	 	1,429,000	1,610,000	1.745,300
May .	 	1,193,900	1,641,600	2,218,400
June .	 	1,201,300	1,655,300	2,178,200

\$17,225,600 \$23,781,328 \$24,277,478

	GRA	IND	TRUN	K	RAILW	Y.	
		19	14		1913		1912
July	 	4,72	4,117	-	5,042,103		4.641,868
Aug.	 	4,85	3,740	1	5,719,812		4.529.937
Sept.	 	4,67	1,561		4,870,641		4.759,332
Oct.	 	3,60	5,500		5,047,641		4,901,964
Nov.	 	3,77	0,406		4,543,623		4,622,408
Dec.	 	4,08	7,977		4,761,352		4.842.965
		19	15		1914		1913
Jan.	 0.0	3,41	0,813		3,766,933		4,048,248
Feb.	 	3,32	5,036		3,546,116		3,763,463
Mar.	 	4,01	4,204		4,423,671		4,778,681
Apr.	 	4,04	10,732		4,413,178		4.685,256
May	 	4,01	5,302		4,309,610		4,905,000
June	 	4,13	53,613		4,293,691		4,914,004
	-	\$48,67	73,001	\$5	4,738,370	85	55,393,216

As compared with the gross earnings of 1912 these of 1914-15 of the Canadian Pacific show a decline of 31 per cent. and the decline of the year, that is as between 1914-15 as compared with 1913-14 is 32 per cent. The decline is at present continuing at about 30 per cent. This tendency we hope to see arrested by the close of September next.

During the last few weeks in June and the first week of July Canadian bank

clearings showed a decline of approximately 23 per cent. At Eastern Canadian clearings points the average declines for the week ending June 30th was 21 per cent; and at Western Canadian points, 41 per cent. These figures do not constitute cheerful reading. They may be viewed from various angles, however, and one is that the people as a whole are economizing as they have been advised to do by the eminent Canadians best able to give good advice and that advice has also been given quite recently by the British When, however, the reapers Premier. commence their work there is not likely to be any lack of employment for the railroads. For every hand there will be necessary and essential work and that will create demands upon our industrial and business organizations.

# How I Escaped from Germany

Continued from Page 10.

ing to bluff. On one of these pictures my stage name "Lissant" was printed in the corner and when his eye fell on the name he exclaimed, "Oh! why, yes, you were singing in Leipzig two years ago. I heard you there in Lohengrin."

It was now clear to me that I had found a friend in this man and that he would do everything in his power to help me to freedom. I suggested, that he might allow me to continue my trip home to Canada.

"Yes," he said "I certainly would like very much to let you go ahead with your intended trip."

Then he thought a minute and looked over to his legal adviser who was sitting on the opposite side of the desk: "You would be very comfortable in Meran. A lot of the British and Russian subjects who were sight-seeing in the Tyrol, when the war broke out are residing there. They are not interned, they are quite free, merely being confined to Meran and its surroundings and obliged to report to the police. The Hotels there are the best in Europe and it is one of the most fashionable and healthy winter resorts in all the mountains of the Tyrol. There is opera, dancing, skating and sleighing all winter through and you would be very well looked after there until the end of

the War."

"But," I said, "can't you let me continue my trip?"

tinue my trip?"
"Well," he said, "I don't know, I would like very much to, but—" And he paused again and looked me up and down in a very, very friendly way.

"You must make a fine Siegfried. I certainly would like very much to see you in that role, but—" and he became very earnest, "you—would—also—make—a—fine—officer—if—ever—you—get—into—the—enemy's—country."

To Be Continued.



# The Gate on Papa Chrom

Continued from Page 13.

"What words are those that you are saving?

"Question for question, Martin Dool. What lies behind that Gate?"

Foster's long arm stretched toward the concrete-filled frame behind him. His eyes blazed on the man who, startled but not afraid, barred his path.

"You are mad," said Dool; "but do not cry out, or you will die before our talk is finished." His empty hands were His empty hands were

trembling.

Foster's automatic flashed from the holster on the word; but it was the butt that he held out within reach of Martin's hand. He was not playing Quixote, however. He was beating an Irishman by chivalry, which is the best way of beating the Irish. Doubtless, he could have killed him and arrested the others on the island -he was sure there was adequate ground for arrest. But there might be a bigger thing to play for. He raised the stakes.

Dool declined the weapon with an un-considered gesture. "How long," he demanded, "is it since you saw her? I would have news."

"A month yesterday." "In the Shetlands?"

"Twelve miles north of Portrush. I was on the north of Ireland patrol."

And how would she be looking?" "Very white, and calm, and still." "Dead! Not dead? Not dead?"

In the pity of the Englishman's face he read that this was so, and sank to the ground, burying his wild eyes in his

"The tide is coming in, cousin of Kate O'Shane," said Foster at length.
"Tell me how she died!"

"Go a little way up the path! She was murdered."

"Tell me who did it," the man whispered in hoarse entreaty, "and I will go." 'Tell me what lies behind that gate!"

Involuntarily Dool's eyes sought the thing of steel and stone, and a new look crept into them, as though the grimly significant words had opened them to a vision of the gates of doom.

"In a word!" he challenged, speaking with a terrible voice.

Foster's arms wrapped themselves about him, setting him down above the reach of the waves before he answered.

"She and three hundred other women were drowned when a liner was sunk by a German submarine."

He took out his pipe, looking away from

the other's pain.

"They swore to me," said the Irishman slowly, "it was only the warships they wanted-the ships of the English tyrant. They have broken faith."

"It was the third big liner," said Foster. "Essenberg knew."

"And kept it from me. It was the work of devils.'

"With whom her cousin is in league!" "And it is your trade," cried Dool,

goaded into flaming wrath.
"It's my trade," came the calm reply.

"Much like gardening-practised by upstanding men and yellow hounds."

But Dool was looking at the waves below, with madness close upon him. "It would be good to die now," he muttered; "and I think I had better kill him too."
"Martin Dool!" Foster snapped, "if it

takes you ten seconds longer to get yourself placed, I'll carry you to the top and kick the stuffing out of you."

The Irishman straightened like a released spring, glaring, but collecting him-

"You are right," he said, "It is the others who must be killed. I will do it with my hands."

"No you won't, you omadhaun"—Foster spoke gently—"Who is bossing this business?

"Bossing?"

"You said it."

"A Saxon!"

"Look, Martin! These are the hands that lifted her white body from the

The Irishman looked-and lifted them

to his lips. It was the sign of fealty.
"I will obey," he said.
An hour later, Foster had mastered the details of the scheme by which Germany had transformed the barren rock of Papa Chrom into a supply base for her under-sea boats. A tunnel bored into the rock by the sea, distinguished from the others in the islands by the rapidity with which, practically unobserved, it had developed, had suggested some such scheme to Martin Dool, an impoverished, brilliant and revolutionary Irish engineer. Cerman brains and money had assisted him to carry out the enterprise. German sympathy and promises had inflamed his hopes of being able to strike a mighty blow for the independence of Ireland. Germany had, unofficially, become his secret ally in the sacred cause he espoused. He could hardly have refused to countenance her use of their joint property in her hour of need, even though it had not seemed to him, as in truth it did, that she was carrying out her part of the bargain and that his compatriots were failing him.

Until this afternoon, his one sorrow had been that Ireland had not risen to her opportunity. He felt, in short, that Germany was his creditor, and that he had nothing with which to pay her. That twenty German submarines had made the round of Britain with the help that his matchless and well-hidden harbor had given had been as nothing to his Celtic soul. That all the talk of those who came was of Germany and not of Ireland had been forgiven them because of Ireland's strange apathy. And if they toasted "The Day" when the submarines should come in force, and when the Grand Fleet should follow them, luring the leviathans of England to their doom, it was the doom of their common enemy to which they looked. And Ireland would awake at last, even

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though without honor when the battle had been won. Thus had reasoned Martin Dool.

In the meantime two submarines, U14 and U41, were permanently based on Papa Chrom, ranging far to the southwest in cruises of twelve and twenty-four days, respectively. Dool had the dates of their visits and of the calls of the transi-Computing from these, it was decided beyond reasonable doubt that U41 had blown up the liner on which Kathleen O'Shane had left America. U14 had been in harbor at the time.

U14 was actually in the harbor at that moment: engine trouble had disorganized the schedule. The flags had been an emergency signal shewing that the harbor was occupied for the day. U41 was ex-

pected.

Foster was glad that he had not arrested Essenberg. The submarine's eighteen-counting executive officers and engineers-gave the island a temporary garrison of twenty-five, a great deal too large a handful for eleven men working in the dark as to the odds against them. His patience had been rewarded. The raise in the stakes was against him; rather beyond his resources, in fact; but he preferred them that way: it made the pool worth scooping.

Another hour's work, Dool said, would fit the U14 for sea. She would leave at midnight, and the newer, larger boat would be in an hour or two later. But first there would be a grand banquet at which every man would be present: it was the invariable procedure. Foster calculated rapidly. He could get a destroyer from Lerwick by one in the morning. which time the U14 would be gone and the U41 quite possibly warned off. which, sub-lieutenant Foster would not be in command. He preferred to do what he could with eleven men and his wits.
"What will bring the U41?" he asked.

"St. Elmo's fire on the weather vane on the house. She will lie off the north shore after the turn of the ebb and wait

for it.

"How's the trick turned?"

"The brush discharge? We have a powerful statical machine for the purpose. It is a good signal-invisible at a distance and easily explained if seen."

"Hm! What are the chances of getting those eighteen men right now?'

"They will watch till you are gone; and Essenberg or the electrician could easily warn them.

"Then I'll go. What time is the banquet?"

"Nine o'clock."

"I'll be back then. It'll be quite dark." "The wire over the fence will give warning if you try to come through the garden. It is insulated and carries a light charge."

They discussed ways and means with thoroughness while Foster familiarized himself with the engine-room, the concealed elevator leading to it from the cave, and the ways of the house and its occupants. A little before sundown he bade farewell to Essenberg and took his patrol away from the islet.

WHILE Papa Chrom was fading into the gloom of a cloudy and moonless night, he schooled Farrell in his part with

a minuteness that for once met that exacting gentleman's requirements; and then the crew so far as he judged it expedient, lashing them unmercifully with his bitter tongue as an antidote to the excitement.

"I could eat five adjectival Germans without salt, and him afterwards," muttered Smith, A.B., to a sympathetic com-

"Silence in the bow!" snapped the quick-eared Foster, well content. And he put the pinnace about and brought her, a few minutes after nine o'clock, silently into the western voe of Papa Chrom.

Ten minutes of inaction passed like so many hours. Then the solid-looking wall of steel and concrete swung noiselessly toward them, revealing a great cavern lit by a single lamp, its extremity lost in gloom. On a platform near the great gate stood Martin Dool, operating a hydraulic engine. Beyond, the stern of the submarine could be seen a sinister outline.

Foster hoisted himself to the rock under which he had talked with Dool and disappeared, clambering cautiously. Farrell took the pinnace into the cave and his men to the elevator shaft, guided by Dool, and waited tensely till Foster should have made things ready. Martin Dool went coolly back to his platform to dispose of two mines. He was quite aware that a false step on Foster's part might bring destruction on them all; and he was in the mood for a spectacular finish.

I N the spacious dining-room the lord of Papa Chrom related to a delighted and slightly vinous circle the tale of the conflict between Farrell's boyish keenness and the malicious humor of his com-

"Had the boy been in charge," he said, "I confess that I should have been un-

easy.
"But why?" asked a stolid lieutenant. "Thanks to the genius of our Irish friend, apart from your own cleverness, my dear Essenberg, nothing could possibly be discovered."

"In truth," replied Essenberg, "I was not an attaché at Washington for nothing. And let me tell you that I have had to earn every mark of the money the Government has spent on my business at Rochester. But such appreciation as this more than fills the balance."

'Drink, gentlemen and sailors!" cried a keen-faced man on the speaker's right, the commander of the U14. "Sons of the Fatherland and brothers all, drink to the American Essenberg and the Irish Dool!"

"But where is Dool?" asked the lieutenant.

"He is a little queer again," replied Essenberg. "He would go to drink with the electrician. Go and fetch him, Anderson, and we will talk of the wrongs of Ireland."

The door opened and Dool entered. "I am here," he said composedly, walking toward the head of the table and leaving the door wide open.

"T HEN lift your glasses," cried the commander, "to . . .

"And kindly keep them lifted. These are bombs. And Mr. Farrell has three men with shotguns outside the windows."

The strange voice speaking in very imperfect German called every eye in alarm

to the door, through which five men with rifles ready had already filed, and to the lean figure of Foster standing by them with an ominous package in each hand.

"Explain a little, Martin," he added in English, "and tell the swine to keep still."

Hearing the Irishman's name, those at the head of the table turned. The commander's hand sought his belt; but, finding himself covered with an unpleasantly steady pistol, he paused. There was a movement of impatience among those who stood on the further side of the table.

Foster, with an arm swung back, cried "Halt!" and chafed because, while Martin delayed, the chances of bloodshed increased. He was not fond of bloodshed.

"Yes, halt!" seconded Essenberg. "Let me collect your weapons for Lieutenant Foster, gentlemen. It would be inconvenient to be killed. Afterward we may prevail on the lieutenant to propose a new toast."

Reaching for the commander's gun, he contrived to press a butten set in the edge

"Nothing doing, Mr. American," said Foster. Your electrician has a pain in the

"Too bad," commented the other, with a sang froid that woke in Foster's wary brain a sense of danger. What was the cause?

"A large American spanner. Get a move on.

"As for me," said the German commander in a meaning tone, "when I do not fight, I surrender." And he flung his sword-belt on the table with disgust.
"I told you, Martin," cried Foster with

glittering eyes, "that some of them were men. Stand a little further to the right and cover the third man."

Essenberg bit his lip. The third man from Dool started slightly, then placed carefully on the table a small egg-shaped object and raised both hands above his

"Stick that thing up where I can hit it," Foster commanded sharply, at the same time dropping his own bombs into his pockets and taking out an automatic. Now relieve the fifth man and the seventh. Stick 'em all up. Any more

pillules about, Essenberg?"
"No more," replied the pseudo-American, still with an undaunted front: "I am beaten." And he tumbled his armful of

guns on the floor.

F OSTER stood in the conning tower of the U14, half a mile east of Papa Chrom. The hour was two in the morning. Thirteen prisoners, bound by his own careful hands, lay under guard in the compartments below him. Nine more, with the paroled commander, inspired an agreeable feeling of responsibility in Midshipman Farrell and two seamen, towing astern in Shetland Patrol Pinnace No. 4. Martin Dool poked his head above the deck of the tower.

"Ye will not submerge? I am going on deck."

Martin had just changed after swiming from the island with a line about his shoulders. He had personally supervised the laying of two contact mines with a wire between them, anchoring them with exact knowledge of the depth

across the entrance of the western voe, and then had spent an hour in the engine room of Papa Chrom alone, while "St. Elmo's fire" flared dim and blue above him. He would have been there still, or preferably on the cliffs above the voe itself, waiting for the reward of his labors, but for Foster's imperative orders. For the sub-lieutenant was handling a submarine for the first time, and his patrolmen were hardly a dependable crew. Martin Dool was worth two of the whole outfit.

"Don't be a fool," said Foster irritably.
"I've enough on my hands without playing circus tricks."

"I was forgetting. You are a very capable man, yourself—I have been thinking. You are quite sure it was the U41 that—

that sunk the liner? Otherwise I would not like to kill them in that way."

"Not a doubt of it, if your dates are right. Anyhow, I can't tackle a boat with forty men and two guns with this outfit."

"Will anything have gone wrong, I wonder?"

Foster checked himself. "For the love of Mike, Martin, go aft and take a look at those engines. And if you don't want to be shot for assisting the enemy, let me do a little thinking."

A dull double roar reached them through the open manhole.

"There she blows," said Foster. "Now are you satisfied?"

Exultation lit the eyes of the man be-

"I'm not caring about the shooting," he said; "but I'll go to the engines."

## Lowering the Cost of Life-Saving

Continued from Page 16.

spinal cord be commenced, each day using a more virulent, i.e., a fresher cord, it is found that at the end of the series inoculation with perfectly fresh cords, which should produce the disease, has no ill effect whatever. This is the principal which has been successfully applied to the treatment of persons who have been bitten by hydrophobia-infected dogs.

When a person who has been bitten by a mad dog applies for treatment he is given an injection of some of this rabbit's spinal cord in the form of an emul-Next day he is given some spinal cord which has hung for a shorter period and on the following day one which is fresher still. Finally at the end of three weeks he may be given freshly infected rabbit's spinal cord with impunity. In other words the symptoms of that loathsome and terrifying disease, rabies, which would likely develop otherwise are warded off for ever. If the patient has not been bitten by a mad dog, well, all the better. He is now immune to rabies and if he is brave enough and foolish enough to cross a mad dog's path can permit himself to be bitten with impunity-so far as rabies is concerned, if not with pleasure.

Typhoid vaccine, even in these days when typhoid fever is becoming a memory, everyone knows of. Who has not at least had soldier friends and relatives who have experienced the aftermath of a vaccine infection and, who has heard a word of typhoid raging in the Canadian ranks in France? Few of us have forgotten the Boer War with its terrific list of casualties among men who were not wounded but struck down by illness. 'Died of enteric' (another name for typhoid fever) was all too often the epitaph of the men who found that they had gone to Africa to fight not Boers but germs.

A vaccine is really a killed culture of bacteria. In the case of typhoid fever, typhoid bacilli are grown in some medicine such as broth. After a sufficiently heavy growth has been obtained the culture, which, as it is, will of course readily produce an attack of typhoid fever, is killed by heat. The number of bacilli in a given quantity (a cubic centimetre) is then estimated by actually counting in a special ruled chamber under the microscope, a certain number are then given to the patient hypodermically. Successive doses of 1,000,000,000 and 1,500,000,000 are the rule. The result is that a protection or immunity is established in the person so treated which lasts for at least two years.

Brilliant results have been obtained in the United States army by this method of immunization—in fact typhoid fever has been stamped out. The department of Hygiene of the University produces the necessary vaccine. Some has been used to immunize soldiers off for the front. A great deal has been used for miners and others whose life leads them to places where sanitation is yet undreamed of and typhoid fever common.

The latest field into which the laboratory has ventured however is the manufacture of tetanus anti-toxin, an activity of special importance in view of the great demand for this product at the front.

Tetanus is most familiarly known to the lay mind by another name. Everyone can remember the firm belief which he had when he was a youngster that a rusty nail in the ball of his thumb or in his heel was sure to result in lock-jaw.

Actually it was tradition with a shadow of truth. Tetanus bacilli abound in rich soil—for instance they may easily be found in the ravine which runs through part of Toronto University grounds. If one happens to cut his foot while walking over such soil or in a stable—where the tetanus bacilli also abound—well, he has considerable more chance of getting lock-jaw than he would otherwise have. Incidentally he can rest assured that in case that unfortunate accident does occur his chance of recovering is slim indeed and his death will be far from a pleasant one. As for the importance of the cut being in



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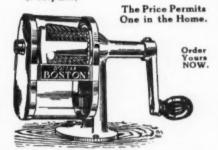
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one's heel or thumb-we can banish it to the limbo of useless superstition.

Tetanus is a disease which is just as dreadful and more to be feared than rabies because it is so much more common. It resembles diphtheria in that the bacillus which causes it, like the diphtheria bacillus, produces a toxin. This is intensely poisonous. One can realize this when he hears that it is two hundred

times as toxic as strychnine.

This death-dealing fluid, like diphtheria toxin, can be produced in the laboratory and, like it, injected into a horse to stimulate the production of anti-toxin. This anti-toxin will cure tetanus, after it has commenced. Its great scope, however, is in cases where wounds have been infected with earth or other material and tetanus is likely to supervene. In such case its injection will postpone an attack indefinitely and for good. The symptoms of tetanus are so shocking that, in a magazine article at least, they too may be definitely postponed. Four out of five persons attacked die and, although life is sweet, are, no doubt, at the end glad to be put out of their agony.

If one happens to be a soldier, fighting in the trenches-say in the Champagne country in Northern France-it is said that shells and other projectiles have an unfortunate habit of not discriminating. A gaping wound filled with the rich soil which grows grapes and tetanus bacilli equally well, will give rise to the liveliest apprehension in the mind of an attending surgeon, and too often the worst foreboding has been justified. Now, since so many cases of tetanus arose during the early part of the war it has been a routine practice in such a case as the above to administer tetanus anti-toxin immediately, not as a cure but in order to prevent the attack which otherwise, is so likely to come on.

So tetanus anti-toxin has become a highly prized commodity of late, and now, indeed, is being sought for in all parts of the world. Some months ago the Canadian Red Cross Association through Col. Ryerson sent an order to the university which amounted to no less than \$3,500. The laboratory of the department of Hygiene procured it. The price paid them was \$3,500 no more and no less.

Tetanus anti-toxin was not actually made by the department at this time. Immediately after this occurrence, however, an effort was made to commence its manufacture. This of course meant, first of all, money. This materialized in the form of a grant from the Dominion Government of \$5,000 and a very substantial gift from Col. Albert Gooderham. Then Dr. D. King Smith offered the buildings of the old Ontario Veterinary College on Temperance street for stabling horses and for any necessary operations on

This magnificent offer of the use of the premises worth half a million dollars was accepted, and the formation of a new laboratory at the university was com-Fourteen horses were bought menced. and sent to their new stables and now tetanus anti-toxin is actually in process

of manufacture. Within a few months many thousands of units will be sent to France and Toronto University will fill a new benevolent role in saving the lives of British soldiers at the front.

To review then, within a year after the foundation of its laboratory the University is supplying diphtheria anti-toxin to all parts of Canada, and incidentally has taken over contracts to supply several large cities, e.g., Toronto, Hamilton and Ottawa. It commenced selling at what a private drug corporation would call a suicidal rate of 25 cents for 1,000 units and has again cut this rate to a fraction above 20 cents, about 1/5 the usual rate. With all this all expenses have been paid and a profit shown. Soon the price of anti-toxin will be reduced again.

A ND what of the future? The project will it is hoped continue to be selfsupporting. Any surplus that accrues will be used not to pay dividends to private individuals but to provide means whereby research in preventive medicine may be carried on. The underlying hope is that other means or methods may be devised whereby human life may be saved or prolonged.

A work of this sort of necessity appeals to the imagination of great philanthropists who are able to materially assist in its further development. At this point one of the board of governors of the university in the person of Col. Albert Gooderham, has undertaken to provide a fitting home in the country where the products may be produced under the ideal conditions necessary. One will readily understand that elaborate stable accommodation for horses and guinea-pigs and laboratory animals is necessary. This can only be provided if a large farm is at the disposal of the university.

In France the French Government has presented the Pasteur Institute with such a farm. In England a wealthy peer has similarly aided the Lister Institute. A like function is being assumed by Col. Gooderham. It may be noted that in all cases these gifts have been without hampering conditions, the sole consideration being the successful development of the

idea.

The anti-toxin laboratory then has a future. But more than that the University has a future. These new activities of a university may give us cause for wonder because they are new. They may make us wonder what we have been doing-then what next.

A university is a centre of knowledge, a fountain head of education. Many a new idea-a radical reform has had its origin in individuals working in university halls. Why should a university as a corporate body not lead in this education of the public in a new sense? Why should she not reach out to touch the hearts and lives of the people as well as their heads, without a written text book make students of communities who will learn, perhaps against their will, that above all is humanity.

#### The Wire

By Robert Welles Ritchie in Harpers.

EVENTY years ago a portraitpainter sat at a clumsy desk in Washington and jiggled a metal tab with nervous finger. In Baltimore an armature clacked, and one understanding its untried speech translated the click into "What hath God wrought!" That day was born the wire. Born a creature of service. Born to obliterate space and make the earth a back-yard for over-fence chattings between the peoples. Two days after the first message passed between Washington and Baltimore over the portrait-painter's stretched wire the Democratic convention in Baltimore nominated James K. Polk for President, and this fact was intrusted to the new messenger for transmission to the Democrats of Congress in Washington. That day the wire was christened the Servant of the News, and bound by its sponsors to the slavery of the world's news-hunger. On a May day in 1844 a dozen words of news limped less than a hundred miles through the air and pious people heard preachers call the circumstance a revelation of divine favor to man. One night in April not many years ago a ship came into New York from the sea, carrying the survivors of a great ocean tragedy, and between nine o'clock and an hour after midnight more than a million words of news-the vivid narratives of those snatched from death-went out over the wires from New York, and perhaps a third of that number more shot under the ocean. Yet not fifty people knew of that heavy burden on the slave of the news; only its masters were aware, and they spoke casually of "extra-heavy traffic."

So in the new revelation of to-day the marvel of yesterday is forgotten. aeroplane soars upward, to the enchained wonder of a multitude; to-morrow it gains no more notice than a hawk unless its operator gambles his neck against applause by driving his machine upsidedown. The world-hunger for news grows more acute each year; as China, Africa, and the islands of the sea move into the back-yard comity of the peoples, gossip of their affairs must pass over the backyard fence. Each year the wire is called upon for sterner service. But no one pauses to be amazed at the increasing news distributing prodigies of the wire; none considers, even, its existence. The news is there on the printed page, propped between the egg-cup and the coffee-pot; that is the sole, satisfying fact the world reckons. Here is a bit of scandal from Seward, Alaska; there a thrill from Teheran, a laugh out of Skiddo, California. What reader possesses the magic spectacles to read behind black lines of type the far more human, more dramatic stories of, say, a dog-team post buried in a blizzard, an Imperial censor hoodwinked under the sword, a desert lineman dying of thirst?

Those whose lives are given to the grooming of the wire estimate that twenty-six hundred papers in the United States receive each day a telegraphic service, either from one of the great news

associations, from their own correspondents, or both. At least four hundred papers divide between them each day a million words of telegraphed news from their correspondents abroad and at home, aside from the general news report furnished by the collecting agencies. In twenty-four hours of an average day 1,190,000 words of news are sent over the land wires of this country. Enough more pass over the cables to and from Europe. the Orient, and our insular possessions to bring the daily average to over two millions. Given an event of startling character or of wide-spread interest, and the average will jump by tens of thousands. A full third of the day's total outpouring may come from a single city: from San Francisco, burning; from Chicago, in the grip of a political convention's hysteria. A bulk of words approximating a novel of Dickens went under the key fingers of operators each day of the Republican convention of 1912, and again at Baltimore almost as many words as Samuel Pepys put into his diary of many busy and gossipy years were flashed to readers the country over before Woodrow Wilson was nominated for the Presidency. Abroad, the impatience of news-hunger is not so exacting as with up-to-the-minute Amer-The slower agency of the mails divides the labor of transmission with the telegraph. Data lacking, men who live with the wire in this country give it as an opinion that the day's average news moving in Europe, exclusive of Great Britain and her colonies, is at most considerably less than in the United States. The impulse toward heavier wire traffic abroad is growing, however, and comes from the insistence of American news agencies upon co-operation under the American spur of speed.

Speed! Speed! That is the cry of the wire to-day. Sure of its own power, strong in its might to serve, the slave of the news demands that the human agency which must be co-ordinated with it shall be keyed to superhuman efficiency. Those who tend the wire must possess its instinct of swift sureness; especially when the clamor of the news-hungry make a delay of seconds intolerable. Once a year in this country comes a test which cracks the nerves of men who groom the wire; but it finds the wire itself fallible only in so far as its aides are incapable of holding themselves to its lightning pace. This is when the baseball madness advances into the dog-days of the so-called World's Series games; when the police have to cleave a lane through the pack watching bulletin boards and graphic diagrams before the newspaper offices in a score of great cities; and when, even in the smaller towns, business yields to the lure of the hastily scrawled bulletin. Tens of thousands witness the games with their own eyes; many millions demand to be spectators by proxy.

Newspapers and news associations prepare for these pennant games as doctors plan to fight a fever. They are under the rowel of the mob's impatience; rivalry

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forces them to a fight wherein seconds lost mean prestige—and dollars—lost. Consider as typical the strategy employed in such a crisis by a certain resourceful news association.

The deciding game between contending teams is to be played on New York's Polo Grounds. Two wires are strung from the office of the association to the places allotted at the press-stand; one is an emergency provision to be used in case the other fails. In the down-town operating office of the news agency connection is made between the active wire at the Polo Grounds and the Chicago "main trunk"; at Chicago a "visible relay" records on an unwinding reel the message that is leaping, reinforced by fresh current, onto the SanFrancisco circuit. In the New York, Chicago, and San Francisco offices operators sit with their eyes on the unreeling tape, ready to flash each character appearing there over subsidiary circuits to Atlanta and the South, to St. Paul and the Northwest, to Los Angeles and all the coast. In each of the cities fed by the circuits the newspapers subscribing to the association's service have loop wires leading to their offices, these carry the message of the circuit automatically. Such the preparations of the news-distributor; and for the telegraph company pains equally assiduous. At each relay point—and that, in the phrase of the craft, where an automatic "repeater" reinforces the carrying current, sharpens the timbre of the metallic chirp and chatter-a wire chief "rides the wire," with his ear to the quality of the voice that speeds. Does weather threaten to paralyze the wire in his territory, he has a "fall-back," or substitute circuit, through unaffected country, built in the air and ready for instant use. Over the entire stretch of wire from the Polo Grounds to San Francisco the circuit is made "blind" it cannot be broken by human agency. All is ready. From Harlem to the Golden Gate the strain is at maximum; men are tensed to action; the wire is alive.
"Cobb flies to Murphy," dictates the

"Cobb flies to Murphy," dictates the baseball reporter in the press-stand, judging the trajectory of the batted ball almost with the crack of the bat. "Cobb flies to Murphy," calls the assist-

"Cobb flies to Murphy," calls the assistant sporting editor of the San Francisco evening paper, and his voice is megaphoned to the crowd blocking Kearney street. Before the high fly batted by Cobb on the Polo Field has smacked the glove of Murphy in the outfield, the traffic policeman standing by Lotta's fountain in the Pacific Coast city knows the play is made.

.... "And is caught out," the reporter in the press-stand supplements.

"Murphy never misses 'em," comments the San Francisco policeman before the outfielder has returned the ball to the pitcher's box.

Once the wire cheated when the destinies of two nations were in the lap of chance.

That was during the conference of the Russian and Japanese peace plenipotentiaries at Portsmouth. The contending armies faced each other across the Shaho in Manchuria, waiting to join again in battle if the negotiations in the American city failed. Fail they must, it appeared. A Sunday came when the deadlock be-

tween the representatives of Czar and Emperor was hopeless; even Count Witte hinted broadly to the correspondents that the following day would see the definite rupture of all peace parleying and a resumption of fighting. Prayers for peace were offered in many churches throughout America that Sunday, though even the devout feared the futility of their appeal. Over in Tokio a correspondent for a London paper, who had a source of information he considered reliable, heard on this dark Sunday that the Emperor had cabled Baron Komura at Portsmouth explicit orders to make peace, even at a sacrifice of Japan's interests. To get that information to his paper was for this correspondent a necessity as urgent as any possible. But the polite, smiling centhe Emperor's guardian set over a babbling cable, stood immovably in the way. The correspondent locked himself in his room and gave many hours to thought, then he presented himself at the cableoffice and filed for transmission an innocent despatch of commonplaces, which included the words, "Rev. Ondit preached to-day; text, 'Good will toward men.'

The polite censor was not acquainted with the Gospel according to St. Luke; he did not remember, if he ever knew, what the heavenly chorus sang on the Nativity morn. No more did he recognize anything reprehensible in the name of the worthy French clergyman, the Rev. Ondit. But the editor of the London paper into whose hands the uncensored cable came knew the full text of the angel's chorus, recognized the beneficent sponsorship of the mythical Ondit. To him this single voice out of Tokio called in the hour most threatening to peace, "They say-peace!" His paper declared, alone, that peace was in sight, and peace came in forty-eight hours.

Consider the wire in its fabrication of mysteries. Two instances may be cited.

In March, 1889, American and German fleets were at anchor in the harbor of Apia, Samoa. Out of a native quarrel, known as the Tamasese rebellion, a grave international crisis had sprung, the ripples of disorder had carried to Washington and Berlin, and affairs were at such a pass between the two nations that a single untoward incident down in the remote South Sea harbor would have launched hostile shots from the guns of the disputants' warders. A steamer connected Apia and the world once in every twenty-eight days. There was no cable. The last steamer from San Francisco to Sydney had been fifteen days out of Apia, and the island port was as far from the world as a harbor in the moon, when from an Australian city this message was flashed under seas to London: "German and American fleets at Apia both totally destroyed. Battle?" The cable did not reveal the source of the rumor. The hazarded "Battle?" was clearly an attempted explanation of the startling rumor, based on knowledge of the strained relations between the fleets. Great excitement and a perilous increase of the war fever were the products of the vagrant despatch until conservative judgment pointed out that it must be a canard-there was no way Apia could have communicated with the world after

the departure of the last monthly steamer.

Just thirteen days from the time the

Just thirteen days from the time the cable cried its message of disaster, the mail-steamer from Sydney arrived at Apia. She passed many dismantled and beached hulks on the way to her anchorage—the wrecks of the American and German warships. Then her people learned of the hurricane that had raged for three days from March 16th; and, later, the world knew that the wire had not lied.

In 1900 disturbing news came out of China, and the Occident began to hear of militant fanatics calling themselves "Boxers." Disorder spread with alarming speed, and, of a sudden, Peking was isolated, its foreign residents driven to the legation compounds and there sieged by a horde of murderous natives. Just before telegraphic communication with the capital was cut by the Boxers, the Hong-Kong correspondent of a New York paper cabled that Baron von Ketteler, German minister to China, had been assassinated. When this dispatch was published the German Foreign Office made excited queries to determine the authenticity of the New York paper's despatch, and with satisfaction annouced the receipt of news from Peking telling that the minister was alive and in no danger. Forty-eight hours after the correspondent in Hong-Kong, a thousand miles from Peking, telegraphed the death of the minister, von Ketteler was killed by a Boxer. The wire had told the truth two days in advance of the event.

The wire serves-serves! Engine of man's devising, it has power beyond the imagination of many men, the physical capacity of any. It is untiring, undaunted. News! The wire makes it and traffics in it. The news-hunger of the world it whets even as it satisfies. No bit of gossip is too small to escape it; none too momentous to abash it. A king may send an ultimatum by wire; but a bricklayer will know he has done so, for the wire tattles it. Minute by minute the clock around the wire buzzes and whispers over all the earth its many-tongued prattle of comedy and tragedy, of disaster and rejoicing, men's hates and women's loves. Perhaps a petty, foolish babble, this; but it is the voice of humanity-of humanity unconscious, away from its dignity. Who shall say the wire is not the present-day nerve-centre of all mankind?

#### British Flash-Light Signal Device

For communicating after night, the signal corps of the British army is equipped with an electric flash-light apparatus which is easily portable and very efficient for medium ranges. In size, and to a somehat less degree in appearance, it is similar to an ordinary camera. It is made substantially with the corners reinforced with metal pieces, and is fitted on the top with a telegraph key. A large lens is provided at the front of the box, inside of which the batteries are carried. The light is flashed by means of the telegraph key, enabling code messages to be transmitted rapidly in much the same manner as by

# Why Wait for the Boss to Fire You?

Many a young man never knows what pay-day he will find the "blue ticket" in his envelope. He is simply one of the crowd who are hired when times are good and fired when times are bad.

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F a young man is prepared to drop all efforts to improve his education after he has left school, he has no chance nowa-days to make a success in life. Even fifty years ago it was customary for a young man after entering on a business career to give up his spare hours to study and to attending lectures on various subjects that would enable him to make his mark later in life. I do not suggest doing away entirely with sports and games and sufficient physical exercise and amusement, but if he desires to take every advantage of his opportunities and to succeed ir. life he should have no hesitation in sacrificing some portion of his spare time to complete or rather add to his educational advantages."

D. R. WILKIE,
(late) President,
Canadian Bankers' Association

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# A Professional Recall: By Rex T. Stout

HEY met at Quinby's unexpectedly, for the first time in three months, and after the handshake proceeded to their old table in the corner

"Well, how goes it?" asked Bendy.

"Bendy," said Dudd Bronson, ignoring the question, "I am the greatest in the man world. I myself am for ham and cabbage, since it

tickles my feelings, but if you want anything from peacock's hearts to marmalade, it's on me."

Bendy stared at the roll of bills Dudd brought out of his trousers' pocket. "Dudd," he said, his voice trembling, "I respect you. Please put it in your breast pocket so I can see the bulge. What was

the occurrence?" "I hate to tell it," declared Dudd. "Bendy, I am a modest man. When you admire me most, remember I said that.

"The pity of it is that there was no one to watch me. I done it in solitude.

"One day, about two weeks ago, I walks into the sanctum of David Jetmore. Jetmore is the best lawyer in Horton, over in Jersey. He's one of them fat, bulgy men that looks right through you with a circumabious gaze.

"'Mr. Jetmore,' says I, 'my name is Abe Delman. I been running it a store over in Pauline with my brother Leo. We had a fight over a personal matter which ain't to the purpose, and when Leo began lookin' for me in an unpeaceful manner I came away for my health. Now I want to get my half of the store which I am broke till I get it, and you should write to Leo's lawyer, who is Mr. Devlin of Ironton, about a settlement.'

"'Have you something for a retainer?" asks Jetmore.

"'No,' says I, 'I'm livin' at a hotel.'

"I'm a busy man,' says Jetmore, 'and how do I know I'll get any money?"

"'Mr. Jetmore,' says I, 'that store's worth three thousand dollars if it's worth a cent. And if my half ain't enough, maybe you can get Leo to give you some of

"Finally, after I explained promiscuously why I had to keep an unsafe distance from brother Leo, and other delicate points, Jetmore says he'll take the job. When he says Devlin, Leo's lawyer in Ironton, is a personal friend of his, I told



Standin' there Lookin' at more,"

with my brother Abe. We had a fight over a personal matter which ain't to the purpose, and Abe left for parts unknown without my blessing. Two days ago comes a letter from Abe's lawyer, Mr. Jetmore, of Horton, about Abe's share in the store, which he didn't wait to take with him, and I told him to write you, because you should make it a settlement for me.'

"Bendy, these lawyers is all the same. All they think about is what's in it for them. They're parasites, Bendy. They're a menace to society.

"'Have you something for a retainer?" asks Devlin.

"'Mr. Devlin,' says I, 'I have not.'
"'Then,' says he, 'how do you expect
to settle with brother Abe?'

Bendy, I know you won't repeat this to any of our friends, or I wouldn't tell it. It fills me with shame, Bendy, when I remember that fifty I handed to Devlin. These lawyers is the worst kind of grafters.

"I told Devlin I didn't want any Pauline natives to know about mine and Abe's intimate pertinacities, and I waits in Ironton for a settlement. As soon as he got my fifty he wrote off a long letter to Jetmore which he let me read to correct the sentiments.

"It would a' been cheaper for me to buy that railroad between Ironton and Horton. For eleven days I kept up a to and fro movement worse than a Mount Vernon commuter. It got so the trains wouldn't start till they saw me comin'. In one day I was Abe three times and Leo twice.

made it all the better, but I had a mental reserve about the espree dee corpse. "That

same afternoon about four hours later I walks into Devlin's office in Ironton.

"'Mr. Devlin,' says I, 'my name is Leo Delman. I been running a store over in Pauline

"Jetmore and Devlin kept burnin' up the mails with lies and criminalities, me a readin' everything so as to preserve my interests. I was yellin' for more on one and less on the other till the fruit got all ripe and just ready for pickin'. Bendy, it was shameful easy. I used to fall asleep in Devlin's office from sheer angwee.

"It was last Thursday when I got to Devlin's sanctum just in time to see him puttin' on his coat to go to lunch with the stenographer.

'Hello, Delman,' says he, 'I'll see you in about half-an-hour. Here's a letter from Jetmore. Make yourself at home till I get back.'

"When he'd gone I read the letter over just to make sure there wasn't no changes since I saw it the night before in Jetmore's office. It said that Abe had decided to accept Leo's offer of twelve hundred dollars cash, provided it was paid within three days.

"I goes to the stenographer's desk, picks out a nice printed letterhead, and writes on it as follows:

March 21, 1912.

Mr. David Jetmore, Horton, N.J.

Dear Sir,-

As per advice contained in your favor of the 30th inst., I am enclosing herewith check for twelve hundred dollars in full payment of claim of Abe Delman against Leo Delman.

I shall be pleased to have you acknowledge receipt of same.

Yours very truly,

"I had already practised Devlin's hand till I was sick of it, and I signed that letter so that Devlin himself couldn't a' told the difference. Then I pulls out a blank check, makes it to the order of Devlin for twelve hundred dollars and signs it 'Leo Delman' and endorses Devlin's name on the back.

"Of course, I could have done some of this work in my own boodwar, but I wanted to use Devlin's typewriter, and be-



Been Running a Store Over in Pauline with my Brother Abe. We had a Fight Over a Personal Matter."

sides, I had a feeling it would be more gentleman-like to do everything right in the office. It somehow seemed natural and right to sign a man's name on his own desk with his own pen and ink.

"When Devlin come back I had the letter all ready to mail stowed away in my

"'Have you got that twelve hundred?'

says he. "'No,' says I, 'but I'll get it in three

days or bust.'
"'You'd better,' says he, 'for when Jetmore says three days he don't mean four.'

"I mailed the letter and check in Ironton that afternoon, and next day-that was Friday-I goes over to Horton on the very first train, and pedestrinates into Jetmore's office on the stroke of ten.

"Jetmore met me cordial like a mule that's just found something to kick. He'd smelled my money.

"'Did you get it?' says I.

"He pulled out the check I'd mailed in Ironton the day before. I looked at it over his shoulder, him holdin' on with both hands.

"'I guess about fifty of that belongs to you,' says I.

"'Fifty!' says he. 'Fifty!'

"'No,' says I, 'I only said it once.'

"That's what comes of gettin' into the clutches of one of them grafters, Bendy. They'll do you every time. But I let it go at a hundred to preserve my own interests. I couldn't afford no argument.

"'Well,' says I, 'give me the check.' "Give me my hundred,' says he. "'I ain't got it," says I.

"'Then we'll cash the check,' says he,

and puts on his coat and hat.

"Bendy, ain't that pitiful? Ain't it pitiful? It was comin' so easy I yawned right in his face. Says he, 'then we'll cash the check.' Oh the big fat boob!

"We goes down to the bank, and Jetmore

steps up to the window.
"'Good-morning, Mr. Jetmore,' says the teller, obsequies-like.

"Jetmore takes a pen, endorses the check, and passes it through the window. "Give it to us in hundreds,' says he.

"'Not for me,' says I, steppin' up. 'Make it twenties.' You know, Bendy, centuries is all right, but they ain't enough of 'em. They're too scarce to be

"The teller counts out ten twenties, slaps 'em on top of a pile with a bandage on 'em, and shoves 'em through the window to Jetmore. He counts off five and I sticks the rest in my pocket.

"'Better count 'em,' says Jetmore.
"'I'll take a chance,' says I. 'The young
man looks honest.' The truth is, I was
beginning to get the shivers. They always come on me when I feel the stuff.

"Me and Jetmore turned to go. Just as we reached the door I felt that pile of twenties jump right out of my pocket and slap me in the face. Standin' there lookin' at us was Devlin.

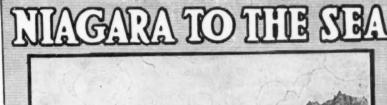
"'Hello, Jetmore,' says he. 'Good-morning, Mr. Delman.'

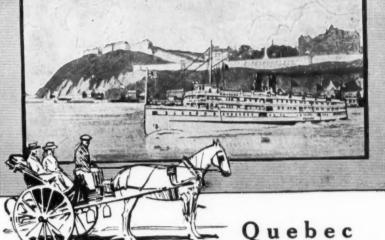
"Bendy, stand up. No man can sit unrespectful while I relate the sequence. It fills my eyes with tears to think of it. I've been a modest man, but this is too much for me. I must tell the truth.

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# who's got the profit

Mr. Edgly, of the rising young firm of Edgly & Taylor, Clothiers, calls on Banker

"Good morning, Mr. Townley. Didn't

"Good morning, Edgly. Anything I can do for you?" Townley's manner reg-

"Why, yes. I want to fix up a little loan —just a thousand—want to discount some

"I see—mm—possibly, possibly. First,

"Certainly, Mr. Townley. Our books

"They may be open to me—but are they

"I don't quite get you, Mr. Townley." "Never mind-we'll try the questions.

"Why-er-I'd have to have that figured up. I can let you know to-morrow."

"You ought to have the figures right in your inside pocket. How much is there

"Well, never mind, I see you don't know. Does your shirt and underwear or hat department pay the best per cent. net

"We couldn't very well get at anything more than an approximate estimate of that. I guess the profit on hats would lead, however."

"You guess. I don't like guess-work as a basis for loans. How much does it cost you to do business?"

"Twenty per cent. is considered a safe estimate in the clothing business."

#### "I See-More Guess-Work

"Who is your most profitable clerk?"

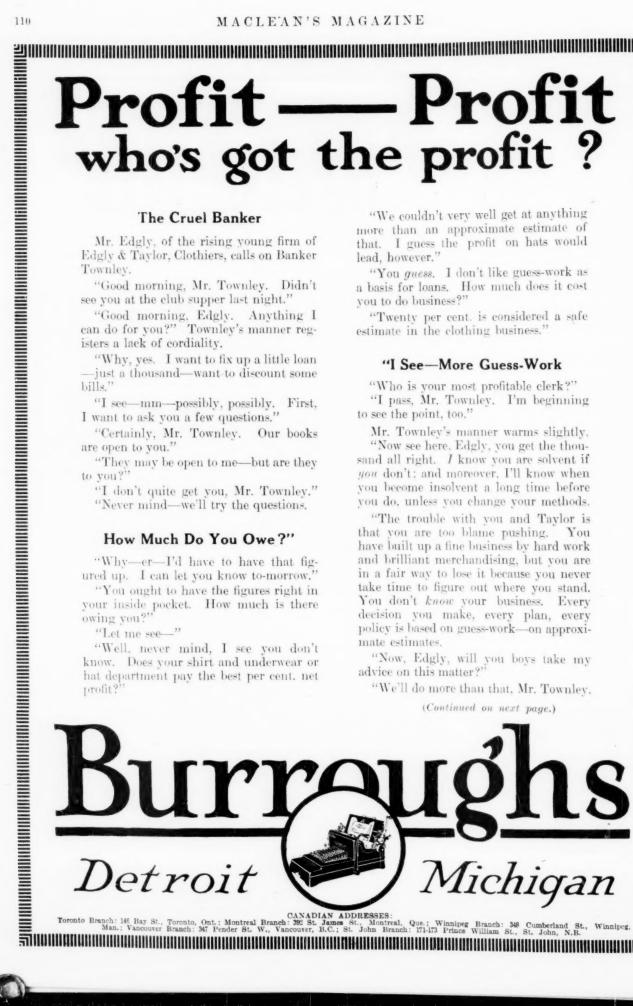
"I pass, Mr. Townley. I'm beginning to see the point, too."

Mr. Townley's manner warms slightly. "Now see here, Edgly, you get the thousand all right. I know you are solvent if you don't; and moreover, I'll know when you become insolvent a long time before you do, unless you change your methods. "The trouble with you and Taylor is that you are too blame pushing. You have built up a fine business by hard work and brilliant merchandising, but you are in a fair way to lose it because you never take time to figure out where you stand. You don't know your business. Every decision you make, every plan, every policy is based on guess-work-on approximate estimates.

"Now, Edgly, will you boys take my advice on this matter?"

"We'll do more than that, Mr. Townley.

(Continued on next page.)



# Profit — Profit who's got the profit?

#### We'll Thank You For It"

"Very well. The general plan I shall suggest will involve some extra figuring. You will need a mechanical means of handling figures so your bookkeeper can do all his regular work and give you, besides this, vital information about your business. That means that your first

move is to get a Burroughs Figuring Machine. We use it in the Bank here glad to show you how it works. When the Burroughs man comes to show you the machine you ought to get, you and your bookkeeper have a good talk with him. Tell

him just what your problems are. He is up on accounting work and can be a big help in starting you right toward getting at the facts of your business. All this won't add to your running expenses. Your bookkeeper, with the help of the figuring machine, can do all the work and do it more easily. What will be the result?

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ance, you will get every day or every week in condensed reports.

"Then, when you need a temporary accommodation, I won't be able to ask a lot of embarrassing questions."

"Say, Mr. Townley, I'm sorry Taylor couldn't have heard this talk of yours. Any-

of yours. Anyway, we'll act on your advice instantly. Thanks for the loan."

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"I was in a hole, all right, but I still had hold of the rope. I knew that Devlin thinks I'm Leo and Jetmore thinks I'm Abe, and as long as they didn't get a chance to chin on it I was safe.

"'Mr. Devlin,' says I, 'I'm glad to see

"'Mr. Devlin,' says I, 'I'm glad to see you. There's a little matter I want to ask you about.'

"Jetmore started to spout before Devlin could answer and I interspersed.

"'It's an important matter,' says I, 'and I won't keep you long.'

"Devlin stood lookin' at us like he didn't understand. Of course, Jetmore knew I knew Devlin, because I'd told him he was mine and Leo's lawyer before the fight.

"Jetmore pulls out his watch and starts

to go.
"'I've got an appointment,' says he.
'I'll see you later. Drop around to the
office about one.' Then he turns to me.

'Come in and say good-bye,' says he, and off he goes.
"It took me about two minutes to explain to Devlin that I'd come up to Hor-

ton to try to get Jetmore to chop off a hundred on the settlement. Devlin laughed. "'Jetmore don't do no choppin',' says

he.
"'Right you are,' says I. 'He won't

even give me no extra time,'
"'What was it you wanted to ask me?"

What was it you wanted to ask me says he.

"'Mr. Devlin,' says I, 'I'm a poor man. Whether I get that twelve hundred I don't know. But I got some friends in Pittsburgh what's got it, and if you'll let me have that fifty back for railroad fare I'll make it a hundred when I settle up.'

"Devlin blinked hard, and I thought he'd jumped it. But bein' a grafter, that hundred looked too good to lose. He pulls out a big wallet, counts out five tens, and hands 'em to me careful-like.

"'Delman,' says he, 'I know you're an honest man. I can tell it by your eyes. I feel sure you'll get the money.'

"'Mr. Devlin,' says I, holdin' his hand in one hand and the fifty in the other, 'I will get the money.' And I leaves him standin' there in the bank, watchin' me through the window.

"Did you go to Pittsburgh?" asked

"Bendy," said Dudd, "don't be factious in the presence of genius. You offend me."

"Forgive me," said Bendy, humbly.
"Let me see the fifty, Dudd. I just want to touch it."

#### To Attack Zeppelins with Explosive Darts

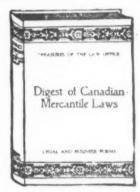
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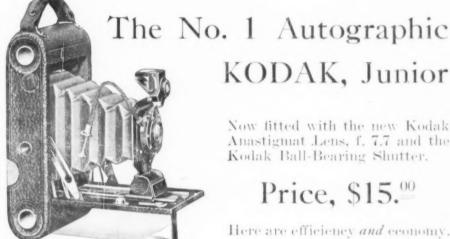
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